### A STUDY OF THE TYPE SPECIMENS OF BIRDS IN THE COLLECTION OF THE ACADEMY OF NATURAL SCIENCES OF PHILADELPHIA, WITH A BRIEF HISTORY OF THE COLLECTION.

#### BY WITMER STONE.

The ornithological collection of the Academy of Natural Sciences of Philadelphia has long been known as one of the largest and most important in the world. It was reported by Dr. P. L. Sclater in 1857 to be "superior to that of any museum in Europe and therefore the most perfect in existence."

Early ornithological activity in America naturally centred around this collection, and we find the names of all our earlier ornithologists connected with the Academy specimens, while the majority of their publications appeared in the *Proceedings* of the society.

Having been engaged for some years in cataloguing the collection and in identifying the type specimens which it contains, I wish to present in the present contribution the results of my investigations in order to record exactly what types are preserved, and the probable history of others which were supposed to be in this collection. The collection of birds was begun soon after the foundation of the Academy in 1812, and by the year 1837 contained about 1,000 specimens; these were contributed by various members, among whom Dr. Harlan, Dr. Trudeau and J. K. Townsend are best known to ornithologists, though Dr. Thomas McEwen seems to have been most active in the care of the collection.

During the succeeding ten years the additions amounted to about 550 specimens, received from John Cassin, S. F. Baird, A. L. Heermann, S. W. Woodhouse, Dr. Watson and R. C. Taylor.

In 1846 Dr. Thomas B. Wilson, afterwards President of the Academy, became interested in the collection, and took steps to enlarge it at his own expense. He entered into arrangements with a European dealer to furnish him with specimens of such species

<sup>&</sup>lt;sup>1</sup> Proc. Zool. Soc. London, 1857, p. 1, "Notes on the Birds in the Museum of the Acad. of Nat. Sci. Phila." An interesting account of the collection.

as the Academy lacked in lots of one hundred at so much per specimen, but upon asking the advice of Dr. J. E. Gray, of the British Museum, as to the terms asked, he was strongly advised to abandon this plan and to purchase an entire collection, several of which were then on the market, that of Victor Massena, Duc de Rivoli, Prince d'Esling, being especially recommended.

Accordingly Dr. Gray was authorized to proceed to Paris and secure the collection, which he promptly did, much to the chagrin of De Blainville and other French naturalists, who had fully expected that the French government would purchase the collection.<sup>2</sup>

The Rivoli collection, numbering about 12,500 specimens, arrived in Philadelphia in September, 1846, and was deposited by Dr. Wilson with the Academy; the old collection being merged with it.<sup>3</sup>

Dr. Wilson followed this purchase with that of the Bourcier collection of Parrots and Tanagers, while his brother, Mr. Edward Wilson, of London, who was also interested in building up the collection, purchased many small collections from J. and E. Verreaux and other dealers, including a number of specimens from the museum of Temminck.

In the following year two more collections were purchased for Dr. Wilson in London: the Gould collection of Australian birds and the Boys Indian Collection.

The former formed the basis of Gould's magnificent work on the birds of Australia, and contained nearly all of his types of Australian birds. It was always Gould's desire that this collection should become the property of the British Museum, and he offered it to the trustees for the moderate sum of £1000. His offer was, however, refused, and his disappointment was so great that in a moment of chagrin he disposed of it to Dr. Wilson.<sup>5</sup>

The Boys collection consisted of a full series of the species collected by Capt. Boys, of the British army, during several years'

<sup>&</sup>lt;sup>2</sup> See Ann. and Mag. Nat. Hist., 1869, Vol. iii, p. 317.

<sup>&</sup>lt;sup>3</sup> See Proc. Acad. Nat. Sci. Phila., 1846, pp. 75, 128, 131, 343.

<sup>&</sup>lt;sup>4</sup> Mr. Wilson was the immediate agent of his brother in the purchase of the Rivoli and other foreign collections.

<sup>&</sup>lt;sup>5</sup> See Sharpe's Index to the Works of John Gould, p. xviii.

residence in India. The duplicates of his collection were dispersed at auction, and Dr. Wilson obtained the only full set.<sup>6</sup>

Neither of these collections reached the Academy for a year or two afterward, the Gould collection being placed in Verreaux's hands for mounting and the Boys collection being loaned to Mr. Gould for use in preparing his *Birds of Asia*.

While Dr. Wilson was bringing together his enormous collection, many smaller additions were being made to the Academy's series.

Between the years 1846 and 1860 the collections of Gambel, Cassin, Edw. Harris, Kern, Krider, Dr. Kane, T. C. Henry, Dr. Heermann, Dr. Woodhouse and McCall were received, and materially increased the collection of North American birds.

On March 20, 1860, Dr. Wilson formally presented his entire collection, then estimated at 26,000 specimens, to the Academy.

The next ten years show comparatively little increase in the collection, the most important additions being the African birds received from the DuChaillu expeditions which were sent out partly under the auspices of members of the Academy, and the D'Oca collection from Mexico.

Quite a number of specimens were received at this time by gift and exchange from the Smithsonian Institution. With the death of Dr. Wilson in 1865, and of John Cassin in 1869, active ornithological work at the Academy ceased, and with the exception of a few scattered specimens, no addition of importance was made to the collection until 1887.

The accessions since that date, as shown in the appended list, have been extensive and number to date about 17,500 specimens.

In the absence of any catalogue of the individual specimens, Cassin's estimate of the collection in 1860 can only be regarded as approximate, and seems to have been too great. He states that there were about 29,000 specimens in the collection at that time, while up to 1887, 2,500 more were received, but our catalogue of the specimens in the museum in 1887 shows only 25,945.

While no doubt a number of specimens were lost or exchanged, it seems hardly possible that as many as five thousand were dis-

<sup>&</sup>lt;sup>6</sup> See Jardine's Contributions to Ornithology, 1848, p. 23.

<sup>&</sup>lt;sup>7</sup> Proc. Acad. Nat. Sci. Phila., 1855, p. 410.

posed of or destroyed, especially in view of the fact that nearly every type specimen or other of especial note is still in our possession.<sup>8</sup>

The following is a summary of the several collections contained in the Academy's museum:

	Academy collection in 1860, 3,000	
	Rivoli collection, first purchase, 12,500	
	Rivoli collection, second purchase, 2,500	
	Gould collection (Australia), 2,000	
	Bourcier collection, 1,000	
	Boys collection (India), 1,000	
	Collections obtained by Edward Wilson, . 4,500	
	Dr. Thomas B. Wilson's original collec-	
	tion,	
	29,000	
1860-64	Du Chaillu collections (Africa) } 428	
1864	D'Oca collection (Mexico),	
	Miscellaneous, 1860–1887, 1,522	
1880	Frazer collection (Pennsylvania), 300	
1887	Butcher collection (North America), . 300	
	Total received to 1887,	
	Actual number of specimens in museum, 1887,	25,945
1888	W. L. Abbott (N. A. and W. Indies),	2,659
1890	F. C. Baker (Florida),	70
1890	Mexican Expedition,	220
1891	S. N. Rhoads (Florida, Texas, Arizona),	875
1891	West Greenland Expedition,	163
1892	Peary Relief and North Greenland Expeditions,	122
1893	G. W. Carpenter (miscellaneous),	237
1893	S. N. Rhoads (Washington and British Co-	
	lumbia),	1,065
1894	R. B. Herron (California),	205

<sup>&</sup>lt;sup>8</sup> In *Proc. Acad. Nat. Sci.*, 1860, p. 86, the Wilson collection is stated as consisting of 26,000 mounted specimens and 2,000 skins. I feel convinced, however, that this is an error and that the estimate of 26,000 as given in detail by Cassin on the next page includes the "2,000 skins." The Academy collection at that date numbered about 3,000 specimens.

1899.]	NATURAL SCIENCES OF PHILADELPHIA.	9
1894	Van Deker (Honduras),	45
1895	Mrs. M. J. Chase (mainly Trochilidæ),	120
1895	T. H. Montgomery (Pennsylvania),	77
1895	S. N. Rhoads (Pennsylvania and New Jersey),	680
1895	S. N. Rhoads (Tennessee),	58
1896	Benjamin Sharp (Alaska),	105
1896	Dr. A. Donaldson Smith (Somaliland, East	
	Africa),	138
1896-97	R. T. Young (North America),	110
1898	G. and J. E. Farnum and Dr. A. D. Smith	
	(Mongolia),	58
1887-97	Miscellaneous,	658
1898	Turnbull Collection (N. A.),	800
1899	Josiah Hoopes' collection (N. A.),	7,250
		41,660
1897	On deposit Stone collection (Pennsylvania and	
	New Jersey),	1,800
	Total specimens, 1898,	43,460

As the collection was left by Dr. Wilson and John Cassin it was nearly all mounted and on exhibition in museum cases in accordance with the ideas prevalent at that time.

Since then, however, it has been clearly demonstrated that mounted specimens have but a limited existence, and sooner or later succumb to the ravages of light and dust, and for years the bulk of all the large collections has been preserved as skins in air-tight, light-proof cases. In accordance with this idea, the rearrangement of the Academy's collection was begun in 1891, and all the types and other valuable specimens as well as many duplicates have been unmounted, and placed in tight cabinets, leaving an ample exhibition series of about 10,000 specimens. Nearly all the recent additions have been skins and have been added to the study series.

In the list of type specimens contained in the Academy collection which follows, the species are arranged according to authors. In order to make the paper more complete, however, mention is made of every author who described new species of birds in the Academy's publications, whether their types are in the collection or not, and the present location of the types, so far as known, is indicated.

These authors are Bonaparte, Townsend, Leib, Gambel, Trudeau, Cassin, Dudley, Hoy, Jones, McCall, Heermann, Sclater, March, Suckley, Woodhouse, Couch, Kennerly, Xantus-De Vesey, Henry, Baird, Elliot, Lawrence, Coues, Cooper, Ridgway, Hoopes, Herrick, Ogden, Gentry, Rhoads and Stone.

Along with the above have been grouped the following American writers: Wilson, Audubon, Say, Nuttall, Cabot, Bryant and Krider, some of whose types are in the collection, but who published elsewhere than in the Academy's journals. The sequence is nearly chronological.

Cassin, being an equal contributor to the ornithology of the Old and New World, is placed at the end of this list, and following him are considered Peale's types and those of the various foreign authors contained in the collections purchased by Dr. Wilson, *i.e.*, Jardine, Strickland, Massena, Verreaux, Lafresnaye, Sir A. Smith, Gould, Lesson, Vieillot, Eyton, Heine, Prevost and Knip.

In nearly every case I have selected one specimen as the type in cases where the describer did not make a selection, giving preference to the male over the female if both are described. This practice seems preferable to considering all the specimens of the original lot to be "cotypes," especially as it is often impossible to ascertain how many of the specimens were in the describer's possession at the time the diagnosis was prepared.

However, in order to be as accurate as possible, I have, in every case, included mention of all the specimens which might be considered as "cotypes" or "paratypes," whether in the Academy's collection or not, so that those who do not agree in the above practice will find all the evidence before them.

Care in selecting a definite type and referring to it in the original publication cannot be too highly commended, as the confusion and difficulties that are presented by the carelessness of the older writers in this respect are only too apparent after having completed a study such as this.

The species are entered under the names by which they are generally known at the present time, the nomenclature following the American Ornithologists' Union Check List in the case of North American birds, and the British Museum Catalogue, in the main, in the case of foreign birds.

It is probable that some names here regarded as synonyms in

accordance with current usage will eventually prove tenable, but to decide all such cases in a publication of this kind is manifestly impossible.

After the current name is given the name which the type represents and the reference to the original description, followed by the catalogue number and data of the type specimen and "paratypes."

Where specimens are stated to be in the British Museum, U. S. National Museum or other institution, the information is quoted respectively from the Catalogue of Birds, Baird, Cassin and Lawrence, Birds of North America, or the various descriptions of the authors themselves.

## ALEXANDER WILSON.

It is probable that all of Wilson's types that were preserved were deposited in Peale's Museum. The collections there contained were dispersed at auction upon the breaking up of the museum and such Wilson specimens as may have been there are probably lost.

Two of the types were, however, obtained in exchange by the Academy before the Peale collection was scattered. These are as follows:

Buteo latissimus (Wilson.)

Falco latissimus Wils. Am. Orn., vi., 1812, p. 92, pl. 54, fig. 1.

1,551. "Original specimen figured by Wilson."

Ictinia mississippiensis (Wilson).

Falco mississippiensis Wils. Am. Orn., iii, 1811, p. 80, pl. 25, fig. 1. 2,032. "Original specimen figured by Wilson."

# THOMAS SAY.

Say's types collected on Major Long's expedition to the Rocky mountains were apparently all deposited in Peale's Museum, and many of them are figured in Bonaparte's American Ornithology and definitely referred to by the Museum numbers.

As in the case of most of Wilson's types, they have been entirely lost sight of. There is no evidence that any of them came into possession of the Academy.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Some data were also kindly furnished by Dr. C. W. Richmond, of the U. S. National Museum.

<sup>10</sup> Early references to the "Philadelphia Museum" refer to Peale's Museum, which bore this name after its reorganization, and not to the Academy, as is often supposed.

# CHARLES L. BONAPARTE.

Bonaparte's types, described in his American Ornithology, were either deposited in Peale's Museum or in his own collection. None of them appear to have been in the Academy collection, nor is there any trace of the types of several species described in the Journal of the Academy, 1824–1827.

Several of his types of foreign birds were, however, received in later years from Verreaux or Massena. A list of them follows:

Nothocercus julius (Bp.).

Tinamus julius Bp. Compt. Rend., xxxvii (1853), p. 633. 12,914. A Colombia. From Verreaux. Type.

Platycercus amathusiæ (Bp.).

Platycercus amathusiæ Bp. Compt. Rend., xxx (1850), p. 133. 22,860. Australia. Type.

Bonaparte quotes "Gould MSS." as authority for this species, but Gould had not at that time published the species, and when he did, in 1855 (Pt. 2, p. 166) he used another name, *P. cyanogenys*, so that Bonaparte remains as the authority for the species. Gould's type is in the British Museum.

Ortygometra verreauxi (Bp.) Compt. Rend., xliii, pp. 599, 600. Ortygometra sclateri (Bp.) Compt. Rend., xliii, pp. 599, 600.

These are nomina nuda so far as I can ascertain. The species were later published by Sclater and Salvin as O. castaneiceps and hauxwelli respectively. The "type specimens" of Bonaparte are in the Academy collection received from Verreaux.

Diphyllodes respublica (Bp.). See under Schlegelia wilsoni of Cassin.

# John K. Townsend.

The new species of birds described by Townsend and Audubon from the Columbia river and Rocky mountains were obtained on an expedition undertaken by Townsend and Nuttall early in 1834.

Nuttall returned in October, 1835, via Hawaii and California, arriving home in August, 1836, while Townsend spent another year on the Columbia, visiting the South Pacific and Chile on his return.<sup>11</sup>

Nuttall met Audubon in Boston immediately after his return and gave him such notes as he had made on the Western birds for use in the *Ornithological Biography*. The only new birds which he seems

<sup>&</sup>lt;sup>11</sup>See Narrative of a Journey Across the Rocky Mountains, etc.

to have obtained were Agelaius tricolor and Pica nuttallii. That he did not collect more was partly due to the fact that he was mainly engaged in collecting plants and partly, as Audubon states, to the fact that "he was not in the habit of carrying a gun on his rambles."

Townsend made the main ornithological collection, and apparently sent home by Nuttall all the specimens he had obtained up to the date of his departure, as the collection was in Philadelphia in 1836. Audubon, hearing of this, hastened to Philadelphia, and was much disgusted because Townsend's friends would not let him describe the new species. An arrangement was, however, effected by which the new birds were to be published by Nuttall and Audubon in a paper in the Journal of the Academy under Townsend's name, and then to be figured in the Birds of America.

And as a part of the same arrangement, Audubon (or Edward Harris for him) purchased the duplicate specimens. 12

The types of the species described by Townsend are most of them still preserved in the Academy's collection. The "duplicates" purchased by Audubon were afterwards given by him to Edward Harris and Spencer F. Baird, and were eventually deposited respectively in the Academy and in the U. S. National Museum.

In some cases there are specimens in the U. S. National Museum of species which are not now contained in the Academy's series, in which case the former must be regarded as the types, otherwise the Academy specimens seem to have the best claim to be so considered.

The specimens collected by Townsend after Nuttall's departure fall into another category. They were apparently (with a few exceptions) sent direct to Audubon, <sup>13</sup> and were published by him in his Ornithological Biography, Vol. v, the types being subsequently given to Harris and Baird along with the others. Most of these are now in the Academy and National Museum, and the question as to which should be considered the types naturally arises. Fortunately there is only one species of which specimens are in both institutions, i. e., Dryobates villosus harrisii, and of this there is little difficulty in fixing the type.

<sup>12</sup> Ornith. Biog., iv, Preface, p. xi.

<sup>&</sup>lt;sup>13</sup> Not, however, those obtained in the S Pacific and Chile which are in the Academy collection.

Townsend, upon his return, published Cypeelus vauxii, Sylvia tolmoei, Cinclus mortoni and Cinclus townsendi, and a complete list of the birds observed by him in the West, noting all the species described by Audubon and himself. A list of all of Townsend's species follows with reference to the type specimens, as well as to such others as are still preserved.

Ægialitis montana (Towns.).

Charadrius montanus Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 192. 24,353. Q Rocky mountains. J. K. Townsend. Type.

Chaetura vauxii (Towns.).

Cypcelus vauxii Towns. Jour. Acad. Nat. Sci. Phila., viii, p. 148.

24,169. Columbia river. J. K. Townsend. Type.

Junco hyemalis oregonus (Towns.).

Fringilla oregona Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 188. 24,048. Columbia river. J. K. Townsend. Type.

Two specimens with same data are in the U. S. National Museum from Baird (Nos. 1,947 and 1,948).

Calcarius ornatus (Towns.).

Plectrophanes ornatus Towns. Jour. Acad. Nat. Sci. Phila., viii, p. 189. 24,099. A Rocky mountains. J. K. Townsend. Type.

Calamospiza melanocorys Stejn.

Fringilla bicolor Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 189.

22,951. Rocky mountains. J. K. Townsend. Type.

23,953. Q Rocky mountains. J. K. Townsend.

Also one in U. S. National Museum, with same data (2,869).

Dendroica auduboni (Towns.).

Sylvia auduboni Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 191. 23,826. O Columbia river. J. K. Townsend. Type.

Also three specimens in U. S. National Museum.

Dendroica nigrescens (Towns.).

Sylvia nigrescens Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 191.

Two specimens in the U. S. National Museum appear to be the only ones extant (Nos. 1,908 and 2,915).

1,908 (U. S. N. M.).  $\circlearrowleft$  June 16, 1835. Columbia river. J. K. Townsend. Type.

Dendroica townsendi (Towns.).

Sylvia townsendi Nutt., Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 191.

One specimen in the U. S. National Museum is the only one extant.

2,918 (U. S. N. M.).  $\circlearrowleft$  Oct. 28, 1835. Columbia River. J. K. Townsend. Type.

This specimen was unique and must have been purchased by Audubon along with the duplicates, or given to him later by Townsend.

### Dendroica occidentalis (Towns.).

Sylvia occidentalis Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 190.

I can find no record of Townsend's specimen of this bird, and it is apparently not in the National Museum.

Geothlypis tolmoei (Towns.).

Sylvia tolmoei Towns. Appendix to Narrative of Journey Across Rocky Mountains, April, 1830, p. 343. Also Jour. Acad. Nat. Sci. Phila., viii, p. 149.

23,765. Columbia river. J. K. Townsend. Type.

Also, three specimens in U. S. Nat. Mus., from Baird (2,907, 1,910 and 1,861).

One of these specimens is the type of Sylvia macgillivrayi Aud. (see below), but in a paper in Jour. Acad. Nat. Sci. Phila., viii, p. 159, Townsend insists that his name (tolmoei) should have priority. In this he was correct, though the fact has been universally overlooked.<sup>14</sup>

## Cinclus mexicanus Sw.

Cinclus montana Towns.

Cinclus townsendii "Audubon" Towns.

These two species are described in the Appendix to Townsend's Narrative, p. 339, with reference to Audubon (Vol. iv, pl. 435). The first is based upon a single male, the latter upon a female. The descriptions were evidently prepared before Audubon's plate and descriptions appeared with the understanding that he would adopt the above names. He meanwhile, however, rightly surmised that they were both identical with *C. americanus* Sw. (= mexicanus Sw.), and published them under that name (*Orn. Biog.*, v, p. 303).

The types may possibly be in the U.S. National Museum.

## Oroscoptes montanus (Towns.).

Orpheus montanus Towns. Jour. Acad. Nat. Sci. Phila, vii, p. 193. 23,728. J. K. Townsend. Type.

## Parus rufescens Towns.

Parus rufescens Towns. Jour. Acad. Nat. Sci., Phila., vii, p. 190. 23,665.  $\bigcirc$  Columbia river. J. K. Townsend. Type.

Also in U. S. National Museum, two similar specimens (2,931 and 1,924).

<sup>14</sup> See Stone "Auk," Jan., 1899.

Psaltriparus minimus (Towns.).

Parus minimus Towns. Jour. Acad. Nat. Sci. Phila., vii, p. 190.

Apparently no specimens are extant.

Sialia mexicana occidentalis (Towns.).

Sialia occidentalis Towns. Jour. Acad. Nat. Sci. vii, p. 188.

Two specimens are in the U.S. National Museum:

1,930 (U. S. N. M.). of Columbia river. J. K. Townsend. Type.

2,949 (U. S. N. M.). Q Columbia river. J. K. Townsend.

# JOHN JAMES AUDUBON.

The history of the Townsend specimens has been explained above and it only remains to speak of such others of Audubon's types as have found their way to the Academy's collection.

Two of these, Colaptes ayersii and Caprimulgus nuttallii, were presented by Audubon himself in 1849.

Columba trudeaui was obtained from J. G. Bell, and the others were presented by Edward Harris in 1849, with the rest of his collection.

Cassin states that Harris' collection contains the types of Quiscalus breweri, Sturnella neglecta, Fringilla harrisii, F. lincolni, <sup>15</sup> Alauda spraguei, Emberiza bairdii and Vireo belli.

Of several of these latter, Audubon also gave specimens to Baird, and it is a question which of these shall be designated as the types. In the list below I have included both the Academy and National Museum specimens in all such cases.

Considering first the species based on Townsend's collection, we find that two of those credited to Audubon in Townsend's list were evidently so given by typographical error—Icterus gubernator and Diomedia chlororhynca being already described by other authors.

Icterus tricolor and Pica nuttalli (type 3,337, U.S.N.M.) were based on Nuttall's specimens, and Picus gairdnerii apparently on one received from Gairdner or Nuttall, while the following were names based on account of birds that had been seen but not secured, and have no standing except Caprimulgus nuttallii, which was rediscovered by Audubon himself in 1843, and properly described:

Phalacrocorax leucurus. Phalacrocorax leuconotus. Phasianus americanus. Picus pyrrhonotus. Turdus townsendii. Caprimulgus nuttallii.

<sup>&</sup>lt;sup>15</sup> Probably Cassin's error. A specimen from the Upper Missouri was presented by Harris, but Audubon's type came from Labrador and seems to be lost.

Of the other species, types of the following are in the U.S. National Museum: 16

Troglodytes parkmani (probably No. 66,644).

Ptilogonys townsendii (No. 2,922).

Sylvia delafieldii (No. 2,905).

Sylvia macgillivrayi (No. 1,910).

Fringilla townsendii (No. 2,874).

Fringilla chlorura (No. 1,896).

Larus occidentalis.

Diomedia fusca.

Phalacrocorax townsendii.

Of the rest, the types are in the Academy collection, as follows, or else have been entirely lost sight of:17

Dryobates villosus harrisii (Aud.).

Picus harrisii Aud. Orn. Biog., v, p. 191.

1,923. A Columbia river. J. K. Townsend. Type.

24,246. Q Columbia river. J. K. Townsend.

Another in the U. S. National Museum does not correspond with either of those mentioned by Audubon in date of capture, so that it is probable that the above pair are those from which he drew his description.

Brachyspiza capensis peruviana (Less.)?

Fringilla mortoni Aud. Orn. Biog., v, p. 312.

10,614. "Columbia river. J. K. Townsend." From Dr. Woodhouse. Type.

This specimen was evidently obtained in Chile, and was wrongly labelled.

The other types of Audubon in the Academy collection are:

Melopelia leucoptera (L.).

Columba trudeauii Aud. Bds. of Am., vii, p. 352.

30,034. "The type specimen described by Mr. Audubon. J. C." Texas. From Bell.

Scolecophagus breweri (Aud.).

Quiscalus breweri Aud. Bds. of Am., vii, p. 345.

3,840. Ft. Union. June 24, 1843. Edw. Harris. Type.

Sturnella magna neglecta (Aud.).

Sturnella neglecta Aud. Bds. of Am., vii, p. 339.

<sup>&</sup>lt;sup>16</sup> I am indebted to Dr. Charles W. Richmond for information relative to the Townsend specimens contained in the National Museum.

<sup>&</sup>lt;sup>17</sup> The lost types are as follows—some of them may, however, be found among the material at the National Museum, part of which, Dr. Richmond informs me, is not at present accessible for examination:

Uria townsendii. Procellaria pacifica. Procellaria tenuirostris. Diomedia nigripes.

The specimen presented by Harris cannot now be found, and the type is therefore

1,939 (U. S. N. M.), June 30, 1843. J. J. Audubon. From S. F. Baird. Colaptes auratus  $\times$  cafer.

Picus ayresei (Aud.). Bds. of Am., vii, p. 348.

30,198.  $\circlearrowleft$  June 19, 1843. From J. J. Audubon, coll. by Bell. Type. Zonotrichia querula (Nutt.).

Fringilla harrisii Aud. Bds. of Am., vii, p. 331.

24,073. Trom Edw. Harris.

24,074. ♀ From Edw. Harris.

Also one specimen in the National Museum:

1,940 (U. S. N. M.).  $\,$   $\,$  'Kickapoo country, May 5, 1843. J. J. Andubon," from S. F. Baird.

Vireo belli (Aud.).

Vireo belli Aud. Bds. of Am., vii, p. 333.

23,880. \$\overline{\cappa}\$ From Edw. Harris.

Also one in the National Museum, viz.:

1,926. (U. S. N. M.) "Ft. Union, 1843. J. J. Audubon." From S. F. Baird.

Anthus spraguei (Aud.).

Alanda spraguei And. Bds. of Amer., vii, p. 334.

23,733. June 24, 1843. Ft. Union. Edw. Harris. Type.

There is also a specimen in the National Museum:

1,854 (U. S. N. M.). "Ft. Union, 1843. J. J. Andubon." From S. F. Baird.

The specimen described is the male.

Ammodramus bairdii (Aud.).

Emberiza bairdii Aud. Bds. of Amer., vii, p. 359.

24,085. Ft Union, 1843. Edw. Harris. Type.

24,086. Ft. Union, 1843. Edw. Harris.

There is also a specimen in the National Museum:

1,885 (U. S. N. M.). Ft. Union, 1843. J. J. Audubon, from Baird.

Phalænoptilus nuttallii (Aud.).

Caprimulgus nuttallii Aud. Bds. of Amer., vii, p. 350.

24,182. From J. J. Audubon. Type.

## THOMAS NUTTALL.

Nuttall's new species were all described in his *Manual*, though he was, in all probability, responsible for the names published under the ostensible authorship of Townsend and Gamble during their absence in the West. Several of Nuttall's species are based on specimens in the Academy's collection as follows:

Zonotrichia coronata (Pallas).

Zonotrichia aurocapilla Nutt.

24,067. 8ept. 22, 1836. Columbia river. Type.

Melospiza fasciata guttata (Nutt.).

Melospiza guttata Nutt.

This species is based upon Audubon's description of Fringilla cinerea (Orn. Biog., v, p. 22), which Nuttall rightly determined was not Fringilla cinerea of Gmelin. Audubon's description was based upon one of Townsend's specimens, which subsequently came into the Academy's possession through Edward Harris, and must of course be regarded as the type of Nuttall's M. guttata.

24,028. O Columbia river. J. K. Townsend. From E. Harris. Type.

A female and an unsexed specimen are in the National Museum, also from Townsend.

Zonotrichia leucophrys gambeli (Nutt.).

Fringilla gambeli Nutt.

Also based on a Townsend specimen in the Academy collection, but the type cannot now be found.

Turdus ustulatus (Nutt.).

Turdus ustulatus Nutt.

Based on a Townsend specimen in the Academy collection which I have identified as

23,644. Columbia river. J. K. Townsend. Type.

## WILLIAM GAMBEL.

Gambel's new species were based mainly upon collections made by him in California and presented to the Academy, where most of the specimens are still preserved, though several have found their way into the National Museum.

Ptychoramphus aleuticus (Pall.).

Mergulus cassinii Gambel. Proc. Acad. Nat. Sci. Phila., xx, 1845, p. 266.

30,073. California. W. Gambel. Type.

Sterna antillarum (Less.)

Sterna frenata Gambel. Proc. Acad. Nat. Sci. Phila., 1848, p. 128. 24,499. Atlantic ocean. Dr. Heermann. Type.

Sterna maxima (Bodd).

Sterna regia Gambel. Proc. Acad. Nat. Sci. Phila., 1848, p. 123. 30,071. Florida. Dr. Heermann. Type.

Sterna elegans (Gambel).

Sterna elegans Gambel. Proc. Acad. Nat. Sci. Phila., 1848, p. 128. 30,070. "Mazatlan, California." W. Gambel. Type.

Dactylortyx thoracicus (Gambel).

Ortyx thoracicus Gambel. Proc. Acad. Nat. Sci. Phila., 1848, p. 77.

12,405. Jalapa, Mex., D'Oca Coll.

12,404. Mexico, Pease Coll. Type.

Callipepla gambelii (Gambel).

Lophortyx gambellii "Nutt." Gambel. Proc. Acad Nat. Sci. Phila., 1843, p. 260.

24,327. California. W. Gambel. Type.

Dryobates nuttallii (Gambel).

Picus nuttallii Gambel. Proc. Acad. Nat. Sci. Phila., 1843, p. 259.

The types of this species seem to be in the National Museum labelled as presented by Dr. Thomas B. Wilson.

3337 (U. S. N. M.). & California. W. Gambel. Type.

Myiodynastes bairdii (Gambel).

Saurophagus bairdii Gambel. Jour. Acad. Nat. Sci. Phila., New Series, i, p. 40.

Type loaned by Baird, and now in U. S. National Museum.

This species inhabits South America. This specimen was wrongly attributed to California.

Oreospiza chlorura (Aud.).

Fringilla blandingiana Gambel. Proc. Acad. Nat. Sci. Phila., 1843, p. 260.

The type of this species cannot be found.

Harporhynchus redivivus (Gambel).

Harpes redivivus Gambel. Proc. Acad. Nat. Sci. Phila., 1845, p. 264.

23715. California. W. Gambel. Type.

Troglodytes aedon (Vieill.).

*Troglodytes sylvestris* Gambel. Proc. Acad. Nat. Sci. Phila., 1846, p. 113.

Proposed for T. americana Aud., which is preoccupied.

No type has been found.

Chamæa fasciata (Gambel).

Parus fasciatus Gambel. Proc. Acad. Nat. Sci. Phila., 1845, p. 265.

Type is in the National Museum.

3,339 (U.S. N. M.). California. Dr. Gambel. From Baird.

Parus gambeli Ridgw.

Parus montanus Gambel. Proc. Acad. Nat. Sci. Phila., 1843, p. 259. The type of this species cannot be found.

Parus inornatus Gambel.

Parus inornatus Gambel. Proc. Acad. Nat. Sci. Phila., 1845, p. 235.

Type is in the National Museum.

3,340 (U. S. N. M.). California. Dr. Gambel. From Baird.

# JAMES TRUDEAU.

Trudeau described in the Academy's Journal for 1837 and 1839, Picus auduboni from New Orleans, Pyranga leucoptera from Mexico. Neither of his types, however, seem to have been presented to the Museum.

# EDWARD HARRIS.

Harris described but one species, the type of which is before me.

Parus atricapillus septentrionalis (Harris).

Parus septentrionalis Harris. Proc. Acad. Nat. Sci. Phila., 1845. p. 300. 29,792, juv. Yellowstone river, upper Missouri. E. Harris. Type.

# GEORGE A. McCall.

Of McCall's types two are preserved in the collection.

Otocoris alpestris occidentalis (McCall).

Otocoris occidentalis McCall. Proc. Acad. Nat. Sci. Phila., 1851, p. 218. 14,883. Santa Fé, N. Mex. July, 1850. Type.

This name must supplant either arenicola or adusta.

Carpodacus mexicanus frontalis (Say).

Carpodacus obscurus McCall. Proc. Acad. Nat. Sci. Phila., 1851, p. 220. 24,141. Q Santa Fé, N. Mex. June, 1850. Type.

Of the other species described by him, the types cannot be found, viz.:

Columba solitaria (McCall). Proc. Acad. Nat. Sci. Phila., 1847, p. 233. *Cyanocorax cassinii* (McCall). Proc. Acad. Nat. Sci. Phila., 1851, p. 216 (= Cyanocephalus cyanocephalus).

Carpodacus familiaris (McCall). Proc. Acad. Nat. Sci. Phila., 1852, p. 61.

GEORGE C. LEIB.

Camptolaimus labradorius (Gm.).

Fuligula grisea Leib. Jour. Acad. Nat. Sci. Phila. (1st series), viii, p. 170.

Type is perhaps one of two old specimens in the collection without data, but this is by no means certain.

# WILLIAM DUDLEY.

Grus americanus (Linn.).

Grus hoyianus Dudley. Proc. Acad. Nat. Sci. Phila., vii, p. 64.

Type in Museum Wisconsin Natural History Society.

### PHILO R. HOY.

Bubo virginianus arcticus (Sw.).

Bubo subarcticus Hoy. Proc. Acad. Nat. Sci. Phila., vi, p. 211.

2,797. Racine, Wisconsin. Dr. Hoy. Type.

Nyctala acadica (Gm).

Nyctale kirtlandii Hoy. Proc. Acad. Nat. Sci. Phila., vi, p. 210.

2,718. Wisconsin. Dr. Hoy. Type.

Buteo bairdii (Hoy). See under Cassin.

# W. L. Jones.

Dryobates pubescens (L.).

*Picus lecontei* Jones. Ann. Lyc. N. H., iv (1848), p. 489. 30,199. A Georgia. Apr. 14, 1847. Dr. W. L. Jones. *Type*.

## A. L. HEERMANN.

Three species were described by Heermann, the types being as follows:

Podilymbus podiceps (Linn.).

Podilymbus lineatus Heermann. Proc. Acad. Nat. Sci. Phila., 1847, p. 179.

4,738. California. A. L. Heermann. Type.

Colymbus nigricollis californicus (Heerm.).

Podiceps californicus Heermann. Pro. Acad. Nat. Sci. Phila., 1854, p. 179.

30,072. California. A. L. Heermann. Type.

Tringytes subruficollis (Heerm.).

Actidurus nævius Heerm. Proc. Acad. Nat. Sci. Phila., 1854, p. 178. 6,694 (U. S. N. M.). San Antonio, Tex. Type.

George Suckley,

C. B. R. KENNERLY,

S. W. Woodhouse,

J. XANTUS DEVESEY,

D. N. Couch,

T. CHARLTON HENRY.

These authors all described new species in the Academy's *Proceedings* (1852–1859) from collections made by them on the various Government surveys, and while many duplicates from the collections have been presented to the Academy by the Smithsonian Institution, the types, with one exception, were retained.

Harporhynchus crissalis (Henry).

Toxostoma crissalis Henry. Proc. Acad. Nat. Sci. Phila., 1858, p. 117. 23,713 (8,127). Ft. Thorn, N. Mex. T. C. Henry. Type. (See also Baird, Rev. Amer. Bds., p. 48).

# SPENCER F. BAIRD.

While a majority of Prof. Baird's new species were described in the Academy's *Proceedings*, most of his types were the property of the U. S. National Museum. Those in the Academy's collection are as follows: Anser albifrons gambeli (Hartl.).

Anser frontalis Baird. Bds. of N. Am., p. 762.

6,055. New Mexico. Dr. T. C. Henry, marked by Cassin as "Type of species."

Two specimens are mentioned in the original description, and this is evidently one of them.

Empidonax minimus (Baird).

*Tyrannula minima* Baird. Proc. Acad. Nat. Sci. Phila.. 1843, p. 284. 4,465 (1,161 S. F. B.). Carlisle, Pa. Aug. 16, 1843, from Baird. *Type*. Empidonax flaviventris (Baird).

Tyrannula flavirentris Baird. Proc. Acad. Nat. Sci. Phila., 1843, p.

283.

The type of this species was also presented to the Academy (see *Proc. Acad. Nat. Sci. Phila.*, 1843, p. 289), but is not now extant.

Lanius fallax, or some allied Old World species.

Collurio ludovicianus robustus Baird. Baird, Brewer and Ridgway. N. A. Bds., i, p. 420 (1874).

15,303. ["California."] Dr. Gambel. Type.

The specimen probably came from the Old World (see Stejneger, Proc. Acad. Nat. Sci. Phila., 1885, p. 91).

Vireolanius eximius Baird.

Vireolanius eximius Baird. Rev. Amer. Bds., 1864, p. 398.

24,497. Bogota, from J. G. Bell. Type.

Dendroica rufigula Baird.

Dendroica rufigula Baird. Rev. Amer. Bds., 1864, p. 204.

8,675. Martinique. Rivoli coll. (?) Type.

Platycichla brevipes Baird.

Platycichla brevipes Baird. Rev. Amer. Bds., 1864, p. 32.

While the Academy specimen, 24,495, is mentioned in the description, the National Museum specimen, 23,954, seems to have the better claim to recognition as the type.

# GEORGE N. LAWRENCE.

As in the case of Baird, Lawrence was a frequent contributor to the *Proceedings*, though most of his types were preserved elsewhere. Only two are in the collection.

Thamnophilus virgatus Lawr.

Thannophilus virgatus Lawr. Proc. Acad. Nat. Sci. Phila., 1868, p. 361. 24,500. Turbo, Panama. W. S. and C. J. Wood, Michler Exp. Type.

This species is wholly ignored in the Catalogue of Birds in the British Museum, but is reëstablished in the Biologia Centr. Amer.,

ii., p. 199, after an examination of this specimen which seems to be unique.

Auriparus flaviceps (Sundev.).

Conirostrum ornatum Lawr. Ann: Lyc. N. Y., v, p. 112. 18,177. Rio Grande River. Capt. J. C. McCown. Type.

This specimen was apparently presented by Lawrence and is labelled as above in his hand.

D. G. ELLIOT,

Elliot Coues,

J. G. COOPER,

ROBERT RIDGWAY.

These authors all contributed diagnoses of new species to the *Proceedings*, but only two of their types are contained in the Academy's collection.

Diomedia melanophrys Boie.

Diomedia gilliana Coues. Proc. Acad. Nat. Sci. Phila., 1866, p. 181.

4,514. (No data.) Type.

Glaucidium jardinii (Bp.).

Glaucidium langsbergii Rdgw. Prcc. Bost. Soc. N. H., xvi, p. 98.

2,586. & Brazil. Type.

2,590. ♀ Caracas.

Though credited to "Leyd. Mus., T. B. Wilson," Ridgway seems to have been the first to publish this name.

## P. L. SCLATER.

Dr. Sclater described several new species in Jardine's Contributions to Ornithology, based on specimens loaned him by Edward Wilson. The types, however, seem to have been afterwards secured by Dr. Sclater, and presented to the British Museum, and never reached the Academy collection.

Such species are:

Euphonia frontalis.

Calliste lunigera.

Calliste xanthogastra.

Some other specimens upon which he based descriptions were lost in shipment to Philadelphia (see *Contr. to Ornith.*, 1852, p. 59). Besides the birds loaned to him by Edward Wilson, Sclater described two new species during his visit to the Academy in 1856. His types in the collection are as follows:

Glaucidium gnoma californicum Scl.

Glaucidium californicum Sel. P. Z. S., 1857, p. 4.

2,559. Q California. Dr. A. L. Heermann. Type.

Pygoptila margaritata (Scl.).

Myrmeciza margavitata Scl. P. Z. S., 1854, p. 253.

8,111. Peru, from Verreaux. Type.

Saltator atripennis Scl.

Saltator atripennis Scl. Proc. Acad. Nat. Sci. Phila., 1856, p. 261.

7,800. Tepayan, N. Granada." Rivoli coll. Type.

7,801. 6 "Popayan, N. Granada." Rivoli coll.

Helodytes humilis Scl.

Campylorhynchus humilis Scl. Proc. Acad. Nat. Sci. Phila., 1856, p. 263.

24,496. & Mazatlan. Bell.

23,908. "California." Dr. Gambel.

# HENRY BRYANT.

Tachycineta cyaneoviridis (Bryant).

Hirundo cyancoviridis Bryant. Proc. Bost. Soc. Nat. Hist., vii (1859), p. 111.

15,639. Nassau, New Providence, Bahamas. Pres. by Dr. Bryant, 1860. Type.

Most of Dr. Bryant's types are presumably in the collection of the Boston Society of Natural History, but this specimen was sent to the Academy immediately after it was described, and is distinctly marked as the type.

# W. T. MARCH.

March described *Mimus hillii* in the Academy's *Proceedings* in 1863, but his type is in the U. S. National Museum.

## SAMUEL CABOT, JR.

Psilorhinus mexicanus Rupp.

Corvus vociferus Cabot. Jour. Bost. Soc. N. H., iv (1844), p. 464., 3,096. Yucatan. Type.

This is the only one of Cabot's specimens in the Academy, and is marked by Prof. Baird as the *type*.

# JOHN KRIDER.

The well-known gunmaker and taxidermist of Philadelphia, though a great collector, was not much of a contributor to ornithological literature, and the only species described by him was the following, which proves to be merely a partly melanistic Common Quail:

Colinus virginianus (L.).

Ortyx virginianus var. hoopesi Krider. Forest and Stream, Vol. xvi, p. 243.

12,391. J. Krider. Type.

# BERNARD A. HOOPES.

Buteo borealis kriderii (Hoopes).

Buteo kriderii Hoopes. Proc. Acad. Nat. Sci. Phila., 1873, p. 238. 1,493.  $\nearrow$  Winnebago Co., Iowa. Sept., 1872. J. Krider. Type.

## HEROLD HERRICK.

Helminthophila lawrencei (Herrick).

Helminthophaga lawrencei Herrick. Proc. Acad. Nat. Sci. Phila., 1874, p. 220.

Type probably in the American Museum of Natural History.

# J. A. OGDEN.

Chettusia crassirostris De Fil.

Chettusia nigrifrons Ogden. Proc. Acad. Nat. Sci. Phila., 1871, p. 196. 11639. Fazogloa Africa. Rivoli coll. Type.

"Chettusia cassini Ogden" seems to be only a manuscript name. No. 11,641,  $\,^{\circ}$ , Java, Rivoli Coll., is labelled as the type with the above name.

Ptilorhis magnifica (Vieill.).

Ptilorhis wilsoni Ogden. Proc. Acad. Nat. Sci. Phila., 1875 (Jan., 1876), p. 451.

3,124. New Guinea. Rivoli coll. Type.

# ALAN F. GENTRY.

Cyanocorax heilprini Gentry.

Cyanocorax heilprini Gentry. Proc. Acad. Nat. Sci. Phila., 1885, p. 90. 3,055. A Rio Negro. Rivoli coll. Type.

Apparently unique, perhaps a hybrid.

### WITMER STONE.

Anous atrofuscus Stone.

Anous atrofuscus Stone. Proc. Acad. Nat. Sci. Phila., 1894, p. 117. 5,027 Mer de Montevideo. Rivoli coll. Type.

Bubo virginianus (Gm.).

Bubo v. occidentalis Stone. Auk, 1896, p. 155.

26,435. Mitchell Co., Iowa. Dr. W. L. Abbott. 1880. Type.

This specimen proved not to be the "Western Horned Owl," but intermediate between *virginianus* and *arcticus*. The "Western Horned Owl" was subsequently named *Bubo* v. *pallescens* Stone (type in U. S. National Museum).

Sturnella magna hoopesi Stone.

Sturnella magna hoopesi Stone. Proc. Acad. Nat. Sci., 1897, p. 149. 786 (Coll. Josiah Hoopes). & Brownsville, Tex. Mar. 13, 1892. F. B. Armstrong. Type.

## SAMUEL N. RHOADS.

Parus hudsonicus columbianus Rhoads.

Parus hudsonicus columbianus Rhoads. Auk, 1893, p. 23. 31,493.  $\circlearrowleft$  Field, B. C. Aug. 30, 1892. Coll. S. N. Rhoads. Type.

## John Cassin.

As the ornithologist of the Academy for over twenty-five years of its greatest ornithological activity, it is not surprising that Cassin described more new species from the collection than any one else, nor is it a matter of wonder that with such a collection constantly at hand he pursued his studies among the birds of all parts of the world with equal freedom. Cassin's publications consisted mainly of his papers in the *Proceedings* and *Journal* of the Academy.

Besides these he published the Birds of California and Texas, Birds of the Japan Expedition, <sup>18</sup> U. S. Astronomical Expedition, <sup>18</sup> the second edition of the Birds of the U. S. Exploring Expedition, and contributed the Raptores, Grallæ and Alcidæ to Baird's Birds of North America.

The types of new species described in the Government publications are all in the National Museum, while the vast majority of those described in these *Proceedings* are in the Academy collection. In a few of the species described in the latter, as well as those in the *Birds of California and Texas*, he frequently says "specimens in the Acad., Phila., and Nat. Mus., Wash.," which occasions some ambiguity. In such cases I have given preference to the Academy specimens as being probably those before him at the time of writing, especially when these are labelled by Cassin himself, but in some instances, as seen below, the National Museum specimens have the better claim.

A word of explanation as to Cassin's connection with the *Birds* of the U. S. Exploring Expedition may not be out of place, as the matter is not generally clearly understood.

The original report was prepared by Titian R. Peale, who accompanied the expedition, but only ninety copies of this work were issued. These which were distributed to the leading libraries but without plates. Subsequently, in consideration of the importance of the work, a new report was prepared by Cassin, accompanied by a volume of plates which had been originally intended to accompany the first edition.

<sup>&</sup>lt;sup>18</sup> In these reports no new species are proposed.

Cassin had the original Peale collection submitted to him upon which to prepare his report. These specimens were mainly returned to the National Museum, but a small number, including some types, were presented to the Academy. Peale's work is remarkable for the number of names it adds to the synonymy, for out of 109 species described as new, only thirty-three are accepted in Cassin's edition. The few novelties described by Cassin from the collection are originally described in the Academy *Proceedings*.

Cassin's types have been grouped geographically in the following list and all the species proposed by him are included whether the types are in the Academy or not.

# Cassin's North American Types.

## Cerorhina monocerata (Pall.).

Cerorhina suckleyi Cass. Baird's Bds. of Am., p. 906.

4,579 (U. S. N. M.). Ft. Steilacoom, Washington T. Dr. G. Suckley. Type.

#### Larus heermanni Cass.

Larus heermanni Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 187.

Type cannot be found.

# Fulmarus glacialis rodgersii (Cass.).

Fulmarus rodgersii Cass. Proc. Acad. Nat. Sci. Phila., 1862, p. 326.

Type in U. S. National Museum.

### Merganser americanus (Cass.).

Mergus americanus Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 187. No type mentioned, based partly on Wilson's plate.

## Oidemia deglandi Bp.

Oidemia velvetina Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 126. 5,540. Egg Harbor, N. J. E. J. Lewis, M.D. Type.

### Chen hyperborea (Pall.).

 $Anser\ albatus$  Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 41. 6,045. Philadelphia market. Type.

# Chen rossii (Cass.).

Anser rossii Cass. Proc. Acad. Nat. Sci. Phila., 1861, p. 73. Type in U. S. National Museum.

## Branta canadensis (L.).

Anser parvipes Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 187. 6,019. Vera Cruz. Dr. Burrough. Type.

#### Grus canadensis L.

Grus fratereulus Cass. Baird's Bds. of Am., p. 656, 10,378 (U. S. N. M.). Albuquerque, N. Mex. Lt. Whipple. Type.

Tringa alpina pacifica (Coues).

Tringa alpina americana Cass. Baird's Bds. of Am., p. 719.

No type mentioned; name proposed for the American bird as distinct from the European.

Aegialitis nivosa Cass.

Baird's Bds. of Am., p. 696.

6,600 (U. S. N. M.). Presidio, Cal. Lt. Trowbridge. Type.

Buteo cooperi Cass.

Buteo cooperi Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 253.

Type in U. S. National Museum.

Buteo borealis calurus (Cass.).

Buteo calurus Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 281.
1,516. N. Mexico. Dr. T. C. Henry. Type.

Buteo lineatus elegans (Cass.).

Buteo elegans Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 281.

1,544. d California. Type.

Buteo swainsoni Bp.

Buteo oxypterus Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 282. 1,465. N. Mexico. Dr. T. C. Henry. Type.

Another specimen (8,550) in the National Museum is recorded by Ridgway as the type, but it is from Ft. Fillmore, while the type is from Ft. Webster. Our specimen is marked *type* by Cassin.

Buteo insignatus Cass. Bds. of Cal. and Tex., p. 102.

"Type is in the Museum of the Nat. Hist. Soc. of Montreal." This was a melanistic specimen.

Buteo bairdii "Hoy" Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 451. 1,469. Wisconsin. Dr. Hoy. Type.

This is a very light-colored individual.

Falco mexicanus Schleg.

Falco polyagris Cass. Bds. of Cal. and Tex., p. 88.

2,175. Source of the Platte. J. K. Townsend. Type.

Falco peregrinum anatum (Bp.).

Falco nigriceps Cass. Bds. of Cal. and Tex., p. 87.

2,072. Bear creek, Cal. Kern. Type.

Polyborus cheriway (Jacq.).

Polyborus auduboni Cass. Proc. Acad. Nat. Sci., 1865, p. 2.

Type in U. S. National Museum.

Megascops asio trichopsis (Wagl.)

Scops mccallii Cass. Bds. of Cal. and Tex., p. 180.

The only specimen in the Academy which could have been examined by Cassin is a very young bird, so that the type should be selected from the National Museum series.

Bubo virginianus pacificus Cass.

Bubo virginianus pacificus Cass. Bds. of Cal. and Tex., p. 178.

This name was proposed for all Horned Owls of the Pacific slope, and no type was designated. As restricted by Stone (Auk, 1896, p. 153), the typical specimen is 27,905,  $\Im$ , San Bernardo, Cal., April, 1887, R. B. Herron.

Bubo virginianus (Gm.).

Bubo virginianus atlanticus Cass. Bds. of Cal. and Tex., p. 178.

Proposed for Horned Owls of the Atlantic slope. No type designated.

Xenopicus albolarvatus (Cass.).

Leuconerpes albolarvatus Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 106.

19,338. A California. J. Bell. Type.

19,335 is the female specimen mentioned.

Sphyrapicus thyroides (Cass.).

Pieus thyroides Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 349.

24,214. Q California. J. Bell. Type.

24,213 is another female with same data.

Chordeiles virginianus henryi (Cass.).

Chordeiles henryi Cass. Bds. Cal. and Tex., p. 233.

24,179. Rio Grande, Lat. 320. Dr. T. C. Henry. Type.

Another with same data is in the National Museum (No. 6,005).

Spinus lawrencei (Cass.).

Carduelis lawrencei Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 105.

24,120. A California. J. G. Bell. Type.

24,121 is a female with same data.

Ammodramus rostratus (Cass.).

Emberiza rostrata Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 184.

24,087. California. Dr. Heermann. Type.

24,088 is another collected at the same time.

Spizella breweri Cass.

Spizella breweri Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 40.

24,050. Black Hills, Dak. J. K. Townsend. Type.

Amphispiza bilineata (Cass.).

Emberiza bilineata (Cass). Proc. Acad. Nat. Sci., Phila., 1850, p. 104. 24,038. Rio Grande, Tex. J. W. Audubon. Type.

Amphispiza belli (Cass.).

Emberiza belli Cass. Proc. Acad. Nat. Sci., 1850, p. 104.

24,036. California. J. G. Bell. Type.

24,034 is another specimen with same data.

Peucæa ruficeps (Cass.).

Ammodramus ruficeps Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 184. 24,031. California. Dr. A. L. Heermann.

3,831 (U.S. National Museum) has the same data.

Vireo flavoviridis (Cass.).

Vireosylvia flavoviridis Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 152. Cassin refers to specimens from Panama and Nicaragua, but none of these seem to be extant.

Vireo philadelphica (Cass.).

Vireosylvia philadelphica Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 153.

23,891. Philadelphia, Sep., 1842. J. Cassin. Type.

Vireo huttoni Cass.

Vireo huttoni Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 150.

3,725 (U.S. N. M.). Monterey, Cal. Hutton. Type.

The specimen from Georgetown, Cal., collected by Bell, cannot be found.

Sitta carolinensis aculeata (Cass.).

Sitta aculeata Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 254. 23,684.  $\circlearrowleft$  California. Dr. Gambel. Type.

Parus atricristatus Cass.

Parus atricristatus (Cass.). Proc. Acad. Nat. Sci. Phila., 1850, p. 103. 23,676. Rio Grande, Tex. J. W. Audubon. Type.

Parus wollweberi Bp.

Parus annexus Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 103. 23,674. Rio Grande, Tex. J. W. Andubon. Type,

Cassin's Mexican and Tropical American Types.

Cathartes burrovianus Cass.

Cathartes burrovianus Cass. Proc. Acad. Nat. Sci., Phila., 1845, p. 212. 58. Vera Cruz. Dr. Burrough. Type.

Regerhinus wilsoni (Cass.).

Čyminidis wilsonii Cass. Proc. Acad. Nat. Sci. Phila., 1847, p. 199. 1,944. ♂ Gibara, Cuba. R. C. Taylor. Type.

1,945 is a female with same data.

Micrastur guerilla Cass.

Micrastur guerilla Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 87.

243. Mexico. Coll. by Pease. Type.

244 from same locality and collector.

Nyctalatinus harrisii Cass.

Nyctale harrisii Cass. Proc. Acad. Nat. Sci. Phila., 1849, p. 157. 2,723. S. America (?) from J. G. Bell. Type.

Ciccaba albogularis (Cass.).

Syrnium albogularis Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 124. 2,689. S. America. Rivoli coll. Type.

2,688 is another specimen with same data.

Ciccaba virgata (Cass.).

Syrinium virgatum Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 124. 2,688. S. America. Rivoli colln. Type.

Megascops brasilianus (Gm.) ?.

*Ephialtes watsonii* Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 123. 2,445. S. America. *Type*.

Another specimen mentioned is 2,444 from the Orinoco.

Ara auricollis Cass.

Ara auricollis Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 372. 22,358. S. America. Rivoli coll. Type.

The other specimens mentioned are 22,359 and 22,357.

Chrysotis viridigenalis Cass.

*Chrysotis viridigenalis* Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 371. 22,506. ♂ Brazil? Rivoli coll. *Type*.

Bolborhynchus lineolus (Cass.).

Psittacula lineola Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 372. 22,984. Mexico (National Bridge). Pease coll. Type.

Brotogeris tuipara (Gm.).

Brotogeris aurifrons Cass. Jour. Acad. Nat. Sci. Phila., 1855, p. 155. 22,458. S. America. Type.

Selenidera spectabilis Cass.

Selenidera spectabilis Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 214. 20,432. 
Veragua, N. Grenada. R. W. Mitchell. Type.

Ramphastos toco Müll.

Ramphastos albogularis Cass. Proc. Acad. Nat. Sci., Phila., 1867, p. 101. 20,392. Central America. Rivoli coll. Type.

Campephilus bairdii Cass.

Campephilus bairdii Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 322. 19,610. ♂ Cuba. R. C. Taylor. Type. Specimens also in U. S. National Museum.

Celeus loricatus (Reichb.).

Celeus mentalis Cass. Proc. Acad. Nat. Sci. Phila., 1860, p. 137. 19,548. Atrato River, N. Grenada. Lt. Michler. Type. 19,547,  $\mathfrak{P}$ , Turbo, is the other specimen mentioned. These were received from the Smithsonian Institution.

Dryobates orizabae (Cass.).

Picus orizabae Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 196. 19,267. S Jalapa, Mex. D'Oca collection. Type. 19,266, a female, with same data.

Dryobates vagus Cass.

Picus vagus Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 196. 19,264. A Mexico? Type.

Also 19,265, \( \begin{aligned} \text{, both from the Rivoli collection.} \end{aligned} \)

Galbula cyaneicollis Cass.

Galbula cyaneicollis Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 154.
20,736. Para, Brazil. J. G. Bell. Type.

20,737 and 20,738 are other Bell specimens.

#### Bucco ordii Cass.

Bucco Ordii Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 154. 20,773. Rio Negro. Type.

Monasa pallescens Cass.

Monasa pallescens Cass. Proc. Acad. Nat. Sci. Phila., 1860, p. 134. 20,830. 
Truando. Lt. Michler. Type.

20,829 is a female with the same data.

Macropsalis forcipata (Nitzsch).

Hydropsalis limbatus Cass. Proc. Acad. Nat. Sci. Phila., 1849, p. 236. 21,946. ♂ S. America. Type.

21,943 is the female also described.

Macropsalis segmentata Cass.

Hydropsalis segmentatus Cass. Proc. Acad. Nat. Sci. Phila., 1849, p. 238.

21,939. A Bogota. Rivoli coll. Type.

21,941,  $\mathcal{P}$ , is the other specimen described by Cassin.

#### Antrostomus serico-caudatus Cass.

Antrostomus serico-caudatus Cass. Proc. Acad. Nat. Sci. Phila., 1849, p. 238.

21,905. S. America. Type.

21,904 is the younger bird mentioned in the description.

Chætura cinericauda (Cass.)

21,781 is the other specimen mentioned. This is not a synonym of *C. pelagica* as given in the British Museum Catalogue.

Claudia squamata (Cass.).

Cypselus squamatus Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 369. 21,770. Guiana. "Dr. Dawson." Type.

In the description the specimen is said to be from "Dr. Dalton."

Pittasoma michleri Cass.

Pittasoma michleri Cass. Proc. Acad. Nat. Sci. Phila., 1860, p. 189.

Type in U. S. National Museum.

Gymnocichla nudiceps (Cass.).

Myiothera nudiceps Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 106. 8,102. 
Panama. J. G. Bell. Type.

Chiromachæris flaveola (Cass.).

Manaeus flaveolus Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 349. 8,536. S Bogota. Type.

Cyanocorax violaceus DuBus.

Cyanocorax harrisii Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 26. 3,061. Guayaqnil, Ecuador. Rivoli coll. Type.

Aphelocoma unicolor (DuBus).

Cyanocorax concolor Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 26.3,39. S. America. Rivoli coll. Type.

Cassicus flavierissus Scl.

Cassicus melanurus Cass. Proc. Acad. Nat. Sci. Phila., 1867, p. 66. 3,828. Guayaquil, Ecuador, from Dr. T. B. Wilson. - Type.

Molothrus rufoaxillaris Cass.

Molothrus rufoaxillaris Cass. Proc. Acad. Nat. Sci. Phila., 1866, p. 23. Type in U. S. National Museum.

Molothrus cabanisii Cass.

 $Molothrus\ cabanisii\ Cass.$  Proc. Acad. Nat. Sci., 1866, p. 22. Type. 3,651. Rivoli coll. Type.

Idiopsar brachyurus Cass.

Idiopsar brachyurus Cass. Proc. Acad. Nat. Sci., 1866, p. 414. Type in U. S. National Museum.

Icterus giraudii Cass.

Icterus giraudii Cass. Proc. Acad. Nat. Sci. Phila., 1847, p. 333. 3,434.  $\nearrow$  Bogota. Type. Several other specimens are in the collection.

Icterus sclateri Cass.

Icterus sclateri Cass. Proc. Acad. Nat. Sci. Phila., 1867, p. 49. 3,423. 

Nicaragua, from Dr. Wilson. Type. 3,424 is a female bearing the same data.

Icterus auricapillus Cass.

Icterus auricapillus Cass. Jour. Acad. Nat. Sci. Phila., 1848, p. 137. 3,431.  $\circlearrowleft$  Central America. Type.

Icterus graceannæ Cass.

Icterus grace-annæ Cass. Proc. Acad. Nat. Sci. Phila., 1867, p. 52. 3,432. Western S. America. Mr. Clay. Type.

Icterus maculi-alatus Cass.

Icterus maculi-alatus Cass. Proc. Acad. Nat. Sci. Phila., 1847, p. 332. 3,453. Coban Vera Paz. Rivoli coll. Type.

Cassin gives "Vera Cruz" as the locality, evidently a misquotation of the label.

Icterus mesomelas (Wagl.).

Icterus salvinii Cass. Proc. Acad. Nat. Sci. Phila., 1867, p. 51. 3,449. Costa Ri.a, from Dr. Wilson. Type.

Another specimen is 3,452, from the Rivoli collection.

Icterus graysoni Cass.

Icterus graysoni Cass. Proc. Acad. Nat. Sci. Phila., 1867, p. 49. Type in U. S. National Museum.

Quiscalus lugubris Sw.

Quiscalus mexicanus Cass. Proc. Acad. Nat. Sci. Phila., 1866, p. 408. 3.681. "Mexico." Type.

Quiscalus fortirostris Lawr. ??

Quiscalus rectirostris Cass. Proc. Acad. Nat. Sci. Phila., 1866, p. 409. 3,684. Rivoli coll. Type.

Quiscalus gundlachii Cass.

Quiscalus gundlachii Cass. Proc. Aca<br/>1. Nat. Sei. Phila., 1866, p. 406. 3,673.  ${\it color op}$  Cuba. R. C. Taylor. Type.

Quiscalus brachypterus Cass.

Also 3,672. Porto Rico. R. Swift.

Spinus xanthogaster (DuBus).

Chrysomitris bryanti Cass. Proc. Acad. Nat. Sci., 1865, p. 91.

Type in U. S. National Museum.

Paroaria nigrogenys (Lafr.).

Tanagra nigro-aurita Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 85. 10,720. Para. Mr. Wülf. Type.

The specimen from Rio Negro which might have better claims to being considered the type cannot be found.

Chlorothraupis olivaceus Cass.

Orthogonys olivaceus Cass. Proc. Acad. Nat. Sci. Phila., 1860, p. 140. 7,572. Truando River, Panama. Lt. Michler. Type.

Calospiza cyaneicollis (Lafr.).

Calliste hannahiæ Cass. Proc. Acad. Nat. Sci. Phila., 1864, p. 287. 7,284, from Mr. Geo. Robbins. ''Maracaibo.'' Type.

The specimen is clearly marked as the type, though Cassin gives the locality as Merida mountains, Venezuela. Probably it was obtained in Maracaibo, and the exact habitat ascertained later.

Calospiza lavinia (Cass.).

Calliste lavinia Cass. Proc. Acad. Nat. Sci. Phila., 1858, p. 178.

The type of this species cannot be found.

Chlorophanes spiza melanops Cass.

Chlorophanes melanops Cass. Proc. Acad. Nat. Sci. Phila., 1864, p. 268. 3,977. ♀ Rio Negro. Rivoli coll. Type.

The other specimen does not seem to have been preserved.

Chlorophanes spiza cærulescens Cass.

Chlorophanes carulescens Cass. Proc. Acad. Nat. Sci. Phila., 1864, p. 268.

3,976.  $\circlearrowleft$  Juracares, Bolivia. Rivoli coll. Type.

This and 3,975, \$\,\partial\$, from same locality, are from D'Orbigny's collection ("No. 149").

Euphonia anneæ Cass.

Euphonia annew Cass. Proc. Acad. Nat. Sci. Phila., 1865, p. 172.

Type in U. S. National Museum.

Buarremon crassirostris Cass.

Buarremon crassirostris Cass. Proc. Acad. Nat. Sci. Phila., 1865, p. 170.

Type in U. S. National Museum.

Arremon aurantiirostris Lafr. ?

Arremon rufidorsalis Cass. Proc. Acad. Nat. Sci. Phila., 1865, p. 170.

Type in U. S. National Museum.

Pitylus poliogaster DuBus.

Pitylus flavocinereus Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 67.
 7,905. A. S. America. Rivoli coll. Type.

Atticora cinerea (Gm.).

Petrochelidon murina Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 370. 15,741. Ecuador, from Edw. Wilson. Type.

Dendroica vieilloti Cass

Dendroica vieilloti Cass. Proc. Acad. Nat. Sei. Phila., 1860, p. 192.

Type is 10,211 (U. S. National Museum); fide Baird, Rev. Amer. Birds.

# CASSIN'S TYPES OF AFRICAN BIRDS.

Cassin published more upon the birds of Africa than those of any of the other continents, being influenced largely by the many collections received from Gaboon and other parts of the continent, especially from Du Chaillu and Dr. McDowell.

Anas hartlaubii (Cass.).

Querquedula hartlaubii Cass. Proc. Acad. Nat. Sei. Phila., 1859, p. 175.

5,736. River Camma, W. Africa. DuChaillu. Type.

5,737. River Camma, W. Africa. DuChaillu.

Phasidus niger Cass.

Phasidus niger Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 322.

12,613. Cape Lopez, W. Africa. DuChaillu. Type.

Guttera plumifera (Cass.).

Numida plumifera Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 321.

12,576. Cape Lopez, W. Africa. DuChaillu. Type.

Francolinus squamatus Cass.

Francolinus squamatus Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 321.

12,163. d Cape Lopez, W. Africa. DuChaillu. Type.

12.162. Cape Lopez, W. Africa. DuChaillu.

Turturæna iriditorques (Cass.).

Columba iriditorques Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 254.

13,296. W. Africa. Dr. McDowell. Type,

Columba unicincta Cass.

Columba unicineta Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 143. 13,280. Ogobai river, W. Africa. DuChaillu. Type.

Spizætus africanus (Cass.).

Limnutus africanus Cass. Proc. Acad. Nat. Sci. Phila., 1865, p. 4. 1,778. Ogobai river, W. Africa. DuChaillu. Type.

1.779. Ogobai river, W. Africa. DuChaillu.

Megascops scops hendersonii (Cass.).

Ephialtes hendersonii Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 186. 2,404. Of Off Novo Redondo, W. Africa. Dr. Henderson. Type. 2,403. Q Off Novo Redondo, W. Africa. Dr. Henderson.

Ortholophus albocristatus (Cass.).

Buceros albocristatus Cass. Proc. Acad Nat. Sci. Phila., 1847, p. 330. 24,498. St. Paul's river, W. Africa. Dr. McDowell. Type.

Bycanistes fistulator (Cass.).

Buceros fistulator Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 68. 9,539. W. Africa, Verreaux. Type.

Lophoceros camurus (Cass.).

Tockus camurus Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 319. 9,520. Cape Lopez, W. Africa. DuChaillu. Type.

Mesopicus elliotii (Cass.).

Polipieus elliotii Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 197. 19,455. Muni river, W. Africa. DuChaillu. Type.

Campothera malherbei (Cass.).

Chrysopicus malherbei Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 198. 18,997. 3.? Zanzibar. Type.

Campothera abingdoni (Smith).

Campethera chrysura lineata Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 327.

18,982. of Port Natal. Type.

Campothera maculosa.

Campethera vestita Cass. Proc. Acad. Nat. Sci. Phila., 1863, p. 197. 18,996. St. Paul's river, W. Africa. Dr. McDowell. Type.

Myioceyx lecontei (Cass.).

Ispidina lecontei Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 158.21,275. W. Africa. DuChaillu. Type.

This specimen seems to be still unique. A drawing of it was sent by Turnbull to Mr. Bowdler Sharpe. The figure in the latter's *Monograph of Alcedinidæ* is taken from it. It is an excellent representation of the bird.

Indicator exilis (Cass.).

Melignothes exilis Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 157. 19,801. Moonda river, W. Africa. DuChaillu. Type.

Indicator conirostris (Cass.).

Melignothes conirostris Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 156. 19,802. Moonda river, W. Africa. DuChaillu. Type.

Prodotiscus insignis (Cass.).

Hetwrodes insignis Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 157. 19,804. Moonda river, W. Africa. DuChaillu. Type.

Heliobucco bonapartii (Hartl.).

Barbatula fuliginosa Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 324. 20,629. Moonda river, W. Africa. DuChaillu. Type.

Barbatula duchaillui Cass.

Barbatula duchailluí Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 324. 20,656. 
Moonda river, W. Africa. DuChaillu. Type.

Merops mulleri (Cass.).

Meropiscus mulleri Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 37. 21,547. Muni river, W. Africa. DuChaillu. Type.

Merops breweri (Cass.).

Meropogon breweri Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 34. 21,620. ♂ Ogobai river, W. Africa. DuChaillu. Type.

21,621 is a female specimen from the same locality.

Malimbus scutatus (Cass.).

Sycobius scutatus Cass. Proc. Acad. Nat. Sci. Phila., 1849, p. 157. 14,104.  $\nearrow$  W. Africa. Dr. McDowell. Type.

14,105. ♀ W. Africa. Dr. McDowell.

Malimbus racheliæ (Cass.).

Sycobius racheliæ Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 36. 14,100. A Muni river, W. Africa. DuChaillu. Type.

14,101. Muni river, W. Africa. DuChaillu.

Pyrenestes coccineus Cass.

Pyrenestes eoccineus Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 67. 14,694. W. Africa. Dr. McDowell. Type.

Hyphantornis badius Cass.

*Hyphantornis badius* Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 57. 14,052. Fazogloa, E. Africa. Rivoli coll. *Type*.

Hyphantornis collaris (Vieill.).

Pyromelana nigriventris (Cass.).

Eupleetes nigroventris Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 66. 14,301. A Zanzibar. Rivoli coll. Type.

Penthetria ardens (Bodd.).

Vidua eoneolor Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 66.14,215. Africa. Rivoli coll. Type.

Steganura paradisea (L.).

Vidua verreauxii Cass. Proc. Acad. Nat. Sei. Phila., 1850, p. 56.

14,177. Abyssinia. Type.

14,193. ♀ Abyssinia.

There are two other males bearing the same data, but 14,177 is evidently the one described.

#### Penthetria albonotata (Cass.).

Vidua albonotata Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 65.

14,226. Port Natal, from Edw. Wilson. Type.

### Spermestes nigriceps Cass.

Spermestes nigriceps Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 185.

14,358. Zanzibar. Rivoli coll. Type.

14,359. ♀ Zanzibar. Rivoli coll.

### Buchanga assimilis Bechst.

Dicrurus aculeatus Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 348. 286. Fazogloa. Rivoli coll. Type.

#### Grancalus azureus Cass.

Graucalus azureus Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 348. 402. W. Africa. Dr. McDowell. Type.

# Lanius pallidirostris Cass.

Lanius pallidirostris Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 244. 15,306. E. Africa. Rivoli coll. Type.

## Lanius pallens Cass.

Lanius pallens Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 245.

15,308. Fazogloa, E. Africa. Rivoli coll. Type.

15,307. Fazogloa, E. Africa. Rivoli coll.

# Laniarius quadricolor (Cass.).

Lanius quadricolor Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 245. 15,136. Port Natal, Africa. Type.

15,138, juv. o Port Natal, Africa. Type.

#### Nicator chloris (Less.).

Laniarius lepidus Cass. Proc. Acad. Nat. Sci., Phila., 1855, p. 327.

The type of this species cannot be found.

### Dryoscopus sublacteus Cass.

Dryoscopus sublacteus Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 246. 15,162. E. Africa? Rivoli coll. Type.

### Dryoscopus leucorhynchus (Hartl.).

Laniarius carbonarius Cass. Proc. Acad. Nat. Sei. Phila., 1851, p. 347. 15,275. W. Africa. Dr. McDowell. Type.

#### Dryoscopus atrialatus Cass.

Dryoscopus atrialatus Cass. Proc. Acad. Nat. Sci. Phila., 1851, p. 246. 15,172. E. Africa? Rivoli coll. Type.

# "Eopsaltria cinerea" Cass.

Proc. Acad. Nat. Sci. Phila., 1856, p. 253.

The type of this species cannot be found, and I do not find the name quoted in synonymy. Its true relationship seems uncertain.

#### Pholidornis rushiæ (Cass.).

Dicacum rushiæ Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 325.

15,553. Moonda river, W. Africa. DuChaillu. Type.

15,554. ♀ Moonda river, W. Africa. DuChaillu.

Parmoptila woodhousei Cass.

Apparently unknown, except from the two specimens described by Cassin, of which the male seems to have been lost.

Psalidoprocne nitens (Cass.).

Atticora nitens Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 38. 15,774. Muni river, W. Africa. DuChaillu. Type.

Psalidoprocne holomelas Sund.

Atticora hamigera Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 57. 15,771. Port Natal. Type.

Hirundo dimidiata Sund.

Hirundo scapularis Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 59. 15,672. E. Africa. Type.

Ægithalus flavifrons Cass.

Egithalus flavifrons Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 325. 9,390. Moonda river, W. Africa. DuChaillu. Type.

Alseonax comitatus (Cass.).

Butalis comitatus Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 35, 576. Muni river, W. Africa. DuChaillu. Type.

Alseonax epulata (Cass.).

Butalis epulatus Cass. Proc. Acid. Nat. Sci. Phila., 1855, p. 326. 577. Moonda river, W. Africa. DuChaillu. Type.

Artomyias fuliginosa Verr.

Butalis infuscatus Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 326. 601. Moonda river, W. Africa. DuChaillu. Type.

Leoptilus olivaceus (Cass.).

Parisona olivaceus Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 52. 806. A Camma river, W. Africa. DuChaillu. Type. This appears to be unique.

Parisoma plumbeum (Hartl.).

Parisoma melanurum Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 51. 811. Camma river, W. Africa. DuChaillu. Type.

Erythrocercus mccallii (Cass.).

Pycnosphrys mecallii Cass. Proc. Acal. Nat. Sci. Phila., 1855, p. 326. 887. Moonda river, W. Africa. DuChailln. Type.

Trochocercus nitens Cass.

Trochocercus nitens Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 50. 894. 

Gamma river, W. Africa. DuChaillu. Type. 893. 

Camma river, W. Africa. DuChaillu.

Terpsiphone cristata (Gm.).

Muscipeta duchaillui Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 48. 986. "O" Camma river, W. Africa. DuChaillu. Type.

985. "juv." Camma river, W. Africa. DuChaillu.

984. "♀" Camma river, W. Africa. DuChaillu.

Muscipeta speciosa Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 48. 990. "?" Camma river, W. Africa. DuChaillu. Type.

The perplexing variations in plumage exhibited by this species are the cause of its many synonyms. It does not yet seem to be properly understood.

## Burnesia bairdii (Cass.).

Drymoica bairdii Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 327. 17,502. Moonda river, W. Africa. DuChaillu. Type.

#### Hylia prasina (Cass.).

Sylvia prasina Cass. Proc. Acad. Nat. Sci. Phila., 1855; p. 325.

17.479. A Moonda river, W. Africa. DuChaillu. Type.

17,498. Moonda river, W. Africa. DuChaillu.

#### Eremomela caniceps (Cass.).

Camuroptera caniceps Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 38. 17,471. A Cape Lopez, W. Africa. DuChaillu. Type.

#### Euprinodes schistaceus Cass.

Euprinodes schistaceus Cass. Proc. Acad. Nat. Sci. Phila., 1858, p. 38. 17,468. A River Camma, W. Africa. DuChaillu. Type.

#### Sylvietta virens (Cass.).

Sylvietta virens Cass. Proc. Acad. Nat. Sci. Phil., 1859, p. 39. 13,906. Cape Lopez, W. Africa. DuChaillu. Type.

# Camaroptera brevicaudata (Cretzch.).

Syncopta tincta Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 325. 17,475. Moonda river, W. Africa. DuChaillu. Type.

#### Turdinus fulvescens (Cass.).

Turdirostris fulvescens Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 54. 13,846. G Camma river, W. Africa. DuChaillu. Type.

17,369. Q Camma river, W. Africa. DuChaillu.

# Macrosphenus flavicans Cass.

Macrosphenus flavicans Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 42.

17,350. & Camma river, W. Africa. DuChaillu. Type.

17,349. ♀ Camma river, W. Africa. DuChaillu.

#### Xenocichla notata (Cass.).

Tricophorus notatus Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 159.

17,113. Moonda river, W. Africa. DuChaillu. Type.

17,115. ♀ Moonda river, W. Africa. DuChaillu.

#### Xenocichla leucopleurus (Cass.).

Phyllostrophus leucopleurus Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 328.

17,031. River Muni, W. Africa. DuChaillu. Type.

#### Xenocichla indicator (Verr.).

Tricophorus leucurus Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 328.

The type of this species cannot be found.

#### Criniger tricolor (Cass.).

Tricophorus tricolor Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 33.

17,012. Muni river, W. Africa. DuChaillu. Type.

17,013. Muni river, W. Africa. DuChaillu.

Criniger xanthogaster Cass.

Criniger xunthoguster Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 327.

17,022. Moonda river, W. Africa. DuChaillu. Type.

17,023. Moonda river, W. Africa. DuChaillu.

17,024. Moonda river, W. Africa. DuChaillu.

Criniger calurus (Cass.).

Tricophorus calurus Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 158.

16,997. Muni river, W. Africa. DuChaillu. Type.

16,998. Muni river, W. Africa. DuChaillu.

Criniger chloronotus (Cass.).

Tricophorus chloronotus Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 43.

16,996. Camma river, W. Africa. DuChaillu. Type.

16,995. Camma river, W. Africa. DuChaillu.

Andropadus curvirostris Cass.

Andropadus curvirostris Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 46.

16,993. Camma river, W. Africa. DuChaillu. Type.

16,994. Camma river, W. Africa. DuChaillu.

Andropadus virens Cass.

Andropadus virens Cass. Proc. Acad. Nat. Sci. Phila., 1857, p. 34.

16,989. Muni river, W. Africa. DuChaillu. Type.

16,988. ♀ Muui river, W. Africa. DuChaillu.

Alethe castanea (Cass.).

Napothera castanea Cass. Prec. Acad. Nat. Sci. Phila., 1856, p. 158.

16,894. Camma river, W. Africa. DuChaillu.

16,528. Camma river, W. Africa. DuChaillu.

Geocichla compsonota Cass.

Geocichla compsonota Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 42.

16,250. Camma river, W. Africa. DuChaillu. Type.

Cassin's Types from Asia, Australia, Etc.

Zapornia tabuensis (Gm.).

Zapornia umbrina Cass. Proc. Acad. Nat. Sci. Phila., 1856, p. 255.

Type in U. S. National Museum (Coll. Expl. Exped.).

Megascops sagittatus (Cass.).

Ephialtes sagittatus Cass. Proc. Acad. Nat. Sci. Phila., 1848, p. 121.

2,410. Malacea. Rivoli coll. Type.

Megascops elegans (Cass.).

Ephialtes elegans Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 185.

2,418. Off coast of Japan, lat. 29° 47′ N., long. 126° 13′ 30′′ E. From Verreaux. Type.

Carpophaga paulina Bp.19

Carpophaga rufinuchalis Cass. Proc. Acad. Nat. Sci. Phila., 1854, p. 228 13,160. Rivoli coll. No data. Type.

Carpophaga vanwycki Cass.

Carpophaga van wyckii Cass. Proc. Acad. Nat. Sci. Phila., 1862, p. 320

<sup>&</sup>lt;sup>19</sup> Bonaparte's description appeared Nov. 8. Cassin's Dec. (after the 19th).

Type in U. S. National Museum (Coll. Expl. Exped.).

Carpophaga pickeringii Cass.

Carpophaga pickeringii Cass. Proc. Acad. Nat. Sci. Phila., 1854, p. 228.

Type in U. S. National Museum (Coll. Expl. Exped.).

Globicera rubricera Bp.20

Carpophaga lepida Cass. Proc. Acad. Nat. Sci. Phila., 1854, p. 230. 13,159. Off north coast of Australia. From Edw. Wilson. Type.

Prioniturus flavicans Cass.

Prioniturus flavicans Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 373. 24,492.  $\,\,\,\,\,\,\,\,\,\,\,$  Celebes. Rivoli coll. Type.

Palæornis calthropæ Layand.

Palæornis viridicollis Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 373. 22,699. A India. From Edw. Wilson. Type. 22,698. Himalayas.

Alcyone lessoni Cass.

Alcyone lessoni Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 69. 21,239 & Havre d'Dory. New Guinea. From Edw. Wilson. Type.

Micropus leucopygialis (Cass.).

Cypselus leucopygialis Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 58. 19,482.  $\,$  Sumatra (?) From Edw. Wilson.  $\,$  Type.

This may be identical with M. subfurcatus Blyth (= offinis Strick.), but Cassin states distinctly that it is not.

Schlegelia wilsonii (Cass.).

Paradisea wilsonii Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 67. 3,152.  $\nearrow$  New Guinea (?) Rivoli coll. Type.

This specimen is stated by Sclater (P. Z. S., 1857, p. 2) to have been the type of Bonaparte's res-publica, but in view of his wretched description it is best to adopt Cassin's name.

Rhipidura cyaniceps (Cass.).

Muscipeta cyaniceps Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 438. Type in U. S. National Museum (Coll. Expl. Exped.).

Melanopyrrhus anais Bp.

Pastor nigrocinctus Cass. Proc. Acad. Nat. Sci. Phila., 1850, p. 68. 16,020. New Guinea. J. G. Bell. Type.

Uroloncha fuscans (Cass.).

Spermestes fuscans Cass. Proc. Acad. Nat. Sci. Phila., 1852, p. 185. 14,584.  $\,\,\,\,\,\,\,\,\,\,$  Borneo. Rivoli coll. Type.

Acrulocercus braccatus (Cass.).

Mohoa braccata Cass. Proc. Acad. Nat. Sci. Phila., 1855, p. 440. 18,581. Hawaiian Isl. J. K. Townsend. Type.

<sup>&</sup>lt;sup>20</sup> Bonaparte's descriptions appeared Nov. 8. Cassin's Dec. (after the 19th).

Hirundo badia (Cass.).

Cecropis badius Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 371.

15,786. Malacca, from J. G. Bell. Type.

15,787. Malacca, from J. G. Bell.

Atticora tibialis (Cass.).

Petrochelidon (?) tibialis Cass. Proc. Acad. Nat. Sci. Phila., 1853, p. 370-15,742. S. America. Rivoli coll. Type.

15,743, juv. Brazil. Rivoli coll.

Tachycineta leucorrhoa Vieill.

Hirundo gouldii Cass. Proc. Acad. Nat. Sci. Phila., 1859, p. 69.

Proposed for H. frontalis Gould, which was preoccupied by H. frontalis Q. and G.

15,631. Austra'ia. Gould coll. Type.

Locustella lanceolata (Temm.) (?)

Lusciniopsis hendersonii Cass. Proc. Acad. Nat. Sci. Phila., 1858, p. 194. 30,069. Hakodadi, Japan. Mr. A. A. Henderson. Type.

Locustella ochotensis (Midd.) (?).

This is probably a distinct species, as suggested by Stejneger (*Proc. U. S. Nat. Mus.*, 1893, p. 634).

# TITIAN R. PEALE.

Peale's descriptions of new birds are confined, so far as I am aware, to the Ornithological and Mammalogical Report of the U.S. Exploring Expedition, he being one of the naturalists composing the party. A good deal of obscurity seems to envelop the history of this publication. It is quite a rare volume.

Some light is shed on the matter, however, by an article in Jardine's Contributions to Ornithology, 1852, p. 89. It is here stated that only one hundred copies of the Reports were issued by the Government, but each author was permitted to order as many more as he chose for his "personal benefit." All the contributors availed themselves of this privilege, with the single exception of Peale, but not one extra copy of his volume was issued, and the work was never for sale.

About ninety of the hundred copies were distributed by the Government, and the rest were destroyed by fire. Subsequently Cassin was engaged to prepare a new edition of the work, and an atlas of plates was issued to accompany it. No plates were issued with Peale's report, though reference is made to plates in the text, and

it is probable that many at least of the plates accompanying Cassin's report were originally intended for Peale's, but were held back when it was decided to republish the work.

The new edition was desirable for many reasons, especially from the fact that of the 109 new species described by Peale only about thirty-three were entitled to recognition.

It has been claimed by some that he was denied the opportunity of consulting the collection at Philadelphia, but in any case his report is a notorious addition to ornithological synonymy.

While most of Peale's types remain in the National Museum, some of them were presented to the Philadelphia Academy.

A few more of these types are also in the Academy collection, being contained in the collection made by J. K. Townsend in Hawaii. Peale used this material, as most of the Hawaiian specimens obtained by the Exploring Expedition were lost in the wreck of the *Peacock*.

The following list includes all of Peale's types now in the Academy collection. In some cases specimens of the same species are preserved in the National Museum:

# Onychotes solitarius (Peale).

Buteo solitarius Peale. Birds U. S. Expl. Exp., 1848, p. 62. 2,304. Hawaii. J. K. Townsend. Type.

#### Accipiter rufitorques (Peale).

Aster rufitorques Peale. Birds U. S. Expl. Exp., 1848, p. 68. 1,227, ad. Feejee Isls. U. S. Expl. Exp. Type (?) 1,228, juv. Feejee Isls.

There seem to have been at least five specimens of this bird collected by the Expedition.

#### Ptilinopus coralensis Peale.

Ptilinopus coralensis Peale. Birds U. S. Expl. Exp., 1848, p. 190.
13,098. Paumotu Isl. U. S. Expl. Exp. T. R. Peale. Type.
13,099. Paumotu Isl. U. S. Expl. Exp. T. R. Peale.

Manuscript notes in the Academy's copy of Peale's Report apparently indicate the number of specimens of many of the species which were obtained. There were three of this form.

#### Ptilinopus fasciatus Peale.

Ptilinopus fasciatus Peale. Birds U. S. Expl. Exp., 1848, p. 193. 13,080. Samoa Isl. U. S. Expl. Exp. T. R. Peale. Type.

Apparently there were three specimens obtained. The above is an adult, like the one described, and is probably the type.

Ptilinopus perousei (Peale).

Ptilinopus perousii Peale. Birds U. S. Expl. Exp., 1848, p. 195. 13,096. Feejee Isls. U. S. Expl. Exp. T. R. Peale. Type.

Three specimens obtained, but the above is evidently the type, as can be seen by comparison with the original description.

Ptilinopus purpuratus (Gm.).

Ptilinopus furcatus Peale. Birds U. S. Expl. Exp., 1848, p. 191. 13,140. Society Isls. U. S. Expl. Exp. T. R. Peale.

Three specimens were obtained, and as the above is a dull-colored, immature bird, and does not agree very well with the description, one of the National Museum specimens had better be regarded as the type.

Globicera auroræ (Peale).

Carpophaga auroræ Peale. Birds U. S. Expl. Exp., 1848, p. 201.

Only one of the four specimens collected by the expedition is in the Academy (13,156). The type is one of the Washington specimens.

Carpophaga latrans Peale.

Curpaphaga latrans Peale. Birds U. S. Expl. Exp., 1848, p. 200. 13,189. Feejee Isls. U. S. Expl. Exp. T. R. Peale. Type.

Two specimens seem to have been obtained. This one is a male and agrees well with the description.

Columba castaneiceps Peale.

Columba castanciceps Peale. Birds U. S. Expl. Exp., 1848, p. 187. 13,285, Upolu, Samoa. U. S. Expl. Exp. T. R. Peale. Type. 13,286, Upolu, Samoa. U. S. Expl. Exp. T. R. Peale.

Only two specimens were secured on the expedition.

Todirhamphus recurvirostris Lafr.

Dacelo minima Peale. Birds U. S. Expl. Exp., 1848, p. 159. 21,448. A Upolu, Samoa. U. S. Expl. Exp. T. R. Peale.

Halcyon sacer (Gm.).

Dacelo coronata Peale. Birds U. S. Expl. Exp., 1848, p. 160.

21,429. Samoa Islands. U. S. Expl. Exp. T. R. Peale.

Dacelo vitiensis Peale. Birds U. S. Expl. Exp., 1848, p. 156.

21,430. Tougataboo. U. S. Expl. Exp. T. R. Peale.

I have no means of ascertaining how many specimens of Kingfishers were obtained. The Washington examples are as likely to be the types as the above.

Corvus hawaiiensis Peale.

Corvus hawaiiensis Peale. Birds U. S. Expl. Exp., 1848, p. 106.

2,830. Hawaii. J. K. Townsend. Typc.

2,831. Hawaii. J. K. Townsend.

1899.]

Myzomela nigriventris Peale.

Myzomela nigriventris Peale. Birds U. S. Expl. Exp., 1848, p. 150. 18,209. Samoan Isl. U. S. Expl. Exp. T. R. Peale.

Four of these were collected.

Myzomela jugularis Peale.

Myzomela jugularis Peale. Birds U. S. Expl. Exp., 1848, p. 150.

18,223. Feejee Isls. U. S. Expl. Exp. T. R. Peale.

Four specimens of this species were in the collection.

SIR WM. JARDINE AND H. E. STRICKLAND.

Many of the birds purchased for the Academy in Europe by Mr. Edward Wilson were submitted to Jardine and Strickland, who were also allowed to publish any which were undescribed in the *Contributions to Ornithology*. The types, of course, were returned to Mr. Wilson. A few species were loaned to Sclater for description in the same publication.

Monacha flavirostris (Strickl.).

Monasa flavirostris Strickl. Contr. Orn., 1850, p. 47.

20,822. Peru. Type.

Heterocercus lineatus (Strickl.).

Elenia lineata Strickl. Contr. Orn., 1850, p. 121.

8,550. O Upper Amazon. Type.

Icterus prosthemelas (Strickl.).

Xanthornis prosthemelas Strickl. Contr. Orn., 1850, p. 120.

3,457. Type.

Tachyphonus rufiventer Spix.

Tachyphonus serrirostris Strickl. Contr. Orn., 1850, p. 49.

7,659. Type.

Todirostrum chrysocrotaphum Strickl.

Todirostrum chrysocrotaphum Strickl. Contr. Orn., 1850, p. 48.

4,177. Peru. Edw. Wilson. Type.

Pachycephala orpheus Jardine.

Pachycephala orpheus "Verr. MSS." Jardine. Contr. Orn., 1849, p. 129.

15,270.  $\bigcirc$  Timor, from Verreaux. Type.

Pachycephala macrorhyncha Strickl.

Pachycephala macrorhyncha Strickl. Contr. Orn., 1849, p. 91.

15,222. Amboine," from Verreaux. Type.

This is distinct from *P. melanura*, with which it is united in the British Museum *Catalogue*.

Pericrocotus minutus Strickl.

Pericrocotus minutus Strickl. Contr. Orn., 1849, p. 94.

498. ♀ Borneo, from Verreaux. Dr. Wilson.

499. O Borneo, from Verreaux. Dr. Wilson.

500. Bornes, from Verreaux. Dr. Wilson. Type.

Euphonia rufiventris (Vieill.).

Euphonia bieolor Strickl. Contr. Orn., 1850, p. 48. 7,130. Peru. Edw. Wilson. Type.

Trichostoma rostratum Blyth.

Trichostoma umbratile Strickl. Contr. Orn., 1849, p. 126. 17,383. Borneo.

Trichostoma celebense Strickl.

Trichostoma eelebense Strick. Contr. Onn., 1849, p. 127. 17,370. Celebes, from Verreaux. Type.

Amuropsis malaccensis (Hartl.).

Brachypteryx poliogenis "Roie" Strickl. Contr. Orn., 1849, p. 93. 17,415. Borneo. From Edw. Wilson. Type.

## JULES AND EDWARD VERREAUX.

Edward Wilson obtained a number of specimens from Verreaux brothers, the famous French bird dealers, and quite a number of these were types of Verreaux's species.

The Verreauxs had the unfortunate practice of sending out specimens with manuscript names which were often never published. Many specimens loaned to Strickland by Mr. Wilson were of this character, and, when describing any of them as new species, to avoid confusion he nearly always adopted Verreaux's manuscript names. In the case of a small collection from the interior of Gaboon, however, the Verreauxs, unknown to Strickland, published all the new species in the Revue et Magasin de Zoologie, while the latter published them almost simultaneously in the Contributions to Ornithology, fortunately using the supposed manuscript names which he found on the labels. These doubly type(!) specimens are as follows:

Hoploterus dinghani (Verr.).

Chettusia dinghani Verr. Rev. et Mag. de Zool., 1855.

11,677. S. Africa. Rivoli coll. Type.

Excalfactoria adansoni (Verr.).

Coturnix adansoni Verr. Rev. et Mag. de Zool., 1851, p. 515. 12.339. 

Q Gaboon. Type.

Turturœna malherbii (Verr.).

Columba malherbii Verr. Rev. et Mag. de Zool., 1851, p. 514. 13.459. Gaboon. Tune.

A specimen of this bird received by the British Museum from Verreaux is catalogued as "probably the type." This is an error, as the Academy specimen is marked "type" by Verreaux. Trachyphonus purpuratus (Verr.).

Trachyphonus purpuratus Verr. Rev. et Mag. de Zool., 1851, p. 260. 20,599.  $\circlearrowleft$  Interior of Gaboon. Type.

Dendropicus gabonensis (Verr.).

Dendrobates gabonensis Verr. Rev. et Mag. de Zool., 1851, p. 513. 19,359. & W. Africa. Type.

Melittophagus variegatus (Vieill.).

Melittophagus cyanipectus Verr. Rev. et Mag. de Zool., 1851, p. 269. 21,514. Gaboon. Type. 21,532. juv. Gaboon.

Halcyon badia Verr.

Haleyon badia Verr. Rev. et Mag. de Zool., 1851, p. 264.
21,307. Gaboon. Type.

Barbatula leucolaima Verr.

Barbatula leucolaima Verr. Rev. et Mag. de Zool., 1851, p. 263, co. ii 1851.

26,680. Gaboon. Type.

Barbatula subsulphurea (Fraser).

Barbatula flavimenta Verr. Rev. et Mag. de Zool., 1851, p. 262. 20,676. Gaboon. Type.

Lamprocolius purpureiceps Verr.

Lamprocolius purpureiceps Verr. Rev. et Mag. de Zool., 1851, p. 418. 16,005. Interior of Gaboon. Type.

Dryoscopus sabinei (Gray).

Hapalophus melanoleucus Verr. Rev. et Mag. de Zool., 1851, p. 512. 15,173.  $\circlearrowleft$  Interior of Gaboon. Type.

Dryoscopus coracinus Verr.

Dicrourus coracinus Verr. Rev. et Mag. de Zool., 1851, p. 311. 256.  $\circlearrowleft$  Interior of Gaboon. Type.

This has been treated as a synonym of *D. modestus* Hartl, but may prove separable. The type of *modestus* is from Prince's Island.

Nigrita luteifrons Verr.

Nigrita luteifrons Verr. Rev. et Mag. de Zool., 1851, p. 420. 14,477. A Gaboon. Type.

Chelidon griseopyga Sund.

Atticora melbina Verr. Rev. et Mag. de Zool., 1851, p. 310. 15.682. Gaboon. Tune.

Anthothreptes aurantium Verr.

Anthreptes aurantium Verr. Rev. et Mag. de Zool., 1851, p. 417. 18,175. 
Interior of Gaboon. Type.

Cinnyris johannæ (Verr.).

Cinnyris johannæ Verr. Rev. et Mag. de Zool., 1851, p. 314. 18,176. Interior of Gaboon. Type.

Hyliota violacea Verr.

Hyliota violacea Verr. Rev. et Mag. de Zool., 1851, p. 308. 786. 3 Gaboon. Type.

Ixonotus guttatus Verr.

Ixonotus guttatus Verr. Rev. et Mag. de Zool., 1851, p. 306. 17,091. Gaboon. Type.

Pratincola salax Verr.

Pratincola salax Verr. Rev. et Mag. de Zool., 1851, p. 307. 722. A Gaboon. Type.

Given as P. olax Verr., "MS." by Strickl.

# OTHER TYPES OF VERREAUX.

Pœocephalus fuscicapillus (Verr. and Des Murs).

Pionus fuscicapillus Verr. et Des Murs. Rev. et Mag. de Zool., 1849, p. 58.

22,632. Q Zanzibar. Rivoli coll.

22,633. Zanzibar. Rivoli coll. Type.

Palæornis modesta Fras.

Palwornis lucianæ Verr. Rev. et Mag. de Zool., 1850, p. 598. 22,697. 
"Moluccas." From Verreaux. Type.

## F. DE LAFRESNAYE.

Among the collections purchased by Dr. Wilson in Paris was that of M. Delatre, obtained in Peru, Bolivia, Colombia and Panama. This contained many novelties, and these were submitted to Lafresnaye for publication before the collection was shipped to America. His paper appeared in the Revue Zoologique, March, 1847, pp. 67–79, and in it eighteen new species were proposed. The types of all of these are preserved in the collection, and their study proves of interest, as some of Lafresnaye's names seem to have been entirely overlooked.

Grallaria monticola Lafr.

Grallaria monticola Lafr. Rev. Zool., 1847, p. 68.

8,199. Ecuador. Delatre coll. Type.

Hypocnemis nævioides (Lafr.).

Conopophaga navioides Lafr. Rev. Zool., 1847, p. 69.

8,588. S. America. Delatre coll. Type.

Ochtheca frontalis (Lafr.).

Tyrannula frontalis Lafr. Rev. Zool., 1847, p. 70. 4.083. A Pasto "Peru." Delatre coll. Type.

Lafresnaye's excellent description seems to have been entirely overlooked and the bird has gone by the name of *O. citrinifrons* Sclater, *P. Z. S.*, 1862, p. 113, which must, however, become of a synonym of *O. frontalis* Lafr.

Pœcilothraupis palpebrosa (Lafr.).

Tanagra palpebrosa Lafr. Rev. Zool., 1847, p. 71.

7.374. Peru. Delatre coll. Type.

Calospiza nigrocineta (Bp.).

Aglaia wilsonii Lafr. Rev. Zool., 1847, p. 71. 7,275. Peru. Delatre coll. Type.

Calospiza larvata fanny (Lafr.).

Aglaia fanny Lafr. Rev. Zool., 1847, p. 72.

Delatre coll. Type.

Tachyphonus delatrii Lair.

Tachyphonus delatrii Lafr. Rev. Zool., 1847, p. 72.

7,660. St. Bonaventure. Delatre coll. Type.

Arremon aurantiirostris Lafr.

Arremon aurantiirostris Lafr. Rev. Zool., 1847, p. 72.

7,789. Panama. Delatre coll. Type.

Saltator albicollis Vieill.

Saltator striatipietus Lafr. Rev. Zool., 1847, p. 73.

7,852. N. Grenada. Delatre coll. Type.

Saltator albicollis Vieill.

Saltator maculipectus Lafr. Rev. Zool., 1847, p. 73.

7,924.  $\bigcirc$  Delatre coll. Type (?).

This is apparently the type of this species, though most of the data have been lost.

Cardinalis phœnicurus granadensis (Lafr.).

Cardinalis granadensis Lafr. Rev. Zool., 1847, p. 74.

9,962. N. Grenada. Delatre coll. Type.

This name has been entirely overlooked. Mr. Robert Ridgway considers it a distinct race from the C. phænicurus of Venezuela.

Guiraca cyanoides Lafr.

Coccoborus cyanoides Lafr. Rev. Zool., 1847, p. 74.

Panama. Delatre coll. Type. 9,775. ♀

Sporophila analoides (Lafr.).

Linaria analoides Lafr. Rev. Zool., 1847, p. 75.

9,914. J Lima, Peru. Delatre coll. Type.

Sporophila inornata (Lafr.).

Linaria inornata Lafr. Rev. Zool., 1847, p. 75.

9,818. A Bolivia. Delatre coll. Type.

Geositta peruviana Lafr.

Geositta peruviana Lafr. Rev. Zool., 1847, p. 75.

6,784. ♀ Lima, Peru. Delatre coll. Type.

Dendroplex picirostris Lafr.

Dendroplex picirostris Lafr. Rev. Zool., 1847, p. 76.

6,979. N. Grenada. Delatre coll. Type.

Picumnis granadensis Lafr.

Picumnus granadensis Lafr. Rev. Zool., 1847, p. 78.

19,751. N. Granada. Delatre coll. Type.

19,757. [N. Granada.] Delatre coll.

Malacoptila panamensis Lafr.

Malacoptila panamensis Lafr. Rev. Zool., 1847, p. 79. 20,805. juv. ♂ Panama. Delatre coll. Type.

# LAFRESNAYE AND D'ORBIGNY.

PROCEEDINGS OF THE ACADEMY OF

The types of the species usually credited to the above authors are generally admitted to be the specimens in the Boston Society of Natural History contained in the Lafresnaye collection.

There are, however, specimens of many of them in the Academy collection, which were originally in D'Orbigny's collection, and subsequently in that of Prince Massena, Duc of Rivoli. These were regarded by Cassin as types, and while they probably have not as good a claim as those in the Boston Society they are in any case paratypes, and are valued accordingly.

Such specimens as are clearly labeled "D'Orbigny's Collection" are the following, though there are doubtless others among the Rivoli specimens:

13,508. Columbigallina cruziana (d'Orb.). "Zacua No. 17, d'Orbigny."

6,998. Dendrornis. Chiquitos. d'Orbigny.

6.999. Dendrornis. Chiquitos. d'Orbigny.

3,775. Ostinops atrovirens (d'Orb.). "Yungas, No. 61, d'Orbigny."

10,647. Emberizagra olivascens (d'Orb.). "Suarba, No. 95, d'Orbigny."

10,646. Emberizagra olivascens (d'Orb.). "Esquichia, No. 95, d'Orbigny."

10,626. Poospiza hypochondria (d'Orb.). S. America, "No. 98, d'Orbigny."

10,627. Poospiza hypochondria (d'Orb.). "Chiquitos, No. 98, d'Orbigny."

10,621. Poospiza melanoleuca (d'Orb.). "Chiquitos, No. 114, d'Orbigny."

10,622. Poospiza melanoleuca. No. 114, d'Orbigny.

10,713. Schistospiza griseocristata (d'Orb.). "No. 104, d'Orbigny."

10,714. Schistospiza griseocristata (d'Orb.). "No. 114, d'Orbigny."

# MASSENA AND SONANCE.

Apparently Prince Massena continued to collect specimens of the *Psittacidæ* after the disposal of his main collection to Dr. Wilson, as in the *Revue et Magasin de Zoologie* for 1854, p. 71, there is a paper under the joint authorship of Massena and Sonancé<sup>21</sup> in

 $<sup>^{\</sup>rm 21}$  Though both names appear as authors, Massena is given as authority for all the species.

which are described nine new Parrots, while in the same journal for 1856 there is a Catalogue of Parrots in the Massena collection, by M. Sonancé, in which two hundred and eighteen species are enumerated, some being described as new.

The types of these latter species seem to have been purchased by the British Museum, as with a few exceptions they are all listed in the Catalogue of Birds in the British Museum, Vol. xx. The Academy has no specimens of them from the Massena collection.

Specimens of all but three of the species described in the former of the papers above mentioned are, however, in the Academy's collection labeled as types of "Massena and Sonancé."

As the original manuscript catalogue contains these specimens it would seem that they were shipped about the same time as the rest of the collection, which reached Philadelphia in 1846, in which case the labels must have been written long before the names were published. It is possible, however, that they were not sent over until after the paper by Massena and Sonancé was prepared.

In any case, the specimens have practically as much claim to being considered the types as those in the British Museum, and a list of them is therefore appended.

# Ara auricollis Cass.

Ara auritorques Mass. Rev. et Mag. de Zool., 1854, p. 71.

22,358. S. America. Rivoli coll. Type.

22,359. S. America. Rivoli coll.

No type of this is in the British Museum.

# Gnathosittacea icterotis (Mass.).

Conurus icterotis Mass. Rev. et Mag. de Zool., 1854, p. 71.

Type in British Museum. No specimen in the Academy collection.

#### Conurus rubrolarvatus Mass.

Conurus rubrolarvatus Mass. Rev. et Mag. de Zool., 1854, p. 71. 22,348. ♂ Guayaquil. Rivoli coll. Type.

A type also in British Museum (Cat. of Bds., xx, p. 183).

#### Conurns æruginosus (L.).

Conurus chrysogenys Mass. Rev. et Mag. de Zool., 1854, p. 72. 22,333.  $\bigcirc$  Colombia. Rivoli coll. Type.

A specimen is also in the British Museum (Cat. of Bds., xx, p. 197), which is evidently one of the type lot, though not so marked by the compiler.

Pyrrhura calliptera (Mass.).

Conurus callipterus Mass. Rev. et Mag. de Zool., 1854, p. 72.

22,385.  $\bigcirc$  Bogota. Rivoli coll.

22,386.  $\ \$  Bogota. Rivoli coll.

22,387. Bogota. Rivoli coll. Type.

No Massena specimen is in the British Museum collection.

Pyrrhura devillei (Mass.).

Conurus devillei Mass. Rev. et Mag. de Zool., 1854, p. 73.

There is no specimen of this bird in the Academy.

The type is in the British Museum (Cat. of Bds., xx, p. 227).

Pyrrhura molinæ (Mass.).

Conurus molinæ Mass. Rev. et Mag. de Zool., 1854, p. 73.

22,388. Q (?) Chiquitos. Rivoli coll.

22,389.  $\mathcal{O}(?)$  Chiquitos. Rivoli coll. Type.

A type is in the British Museum (Cat. of Bds., xx, p. 227).

Pionus selinoides (Mass.).

Psittacus selinoides Mass. Rev. et Mag. de Zool., 1854, p. 73. 22,542.  $\nearrow$  Bogota. Rivoli coll. Type.

A type is in the British Museum (Cat. of Bds., xx, p. 226).

Pionus cobaltinus (Mass.).

Psittacus cobaltinus Mass. Rev. et Mag. de Zool., 1854, p. 74. 22,536. juv. & S. America. Rivoli coll. Type.

A type is in the British Museum (Cat. of Bds., xx, p. 325).

#### JOHN GOULD.

As already explained, Dr. Wilson secured Gould's entire collection of Australian birds, including nearly all of the types of species described up to and including the seventh volume of his Birds of Australia. The types of the species described in the supplement, as well as such additional specimens as were procured after Dr. Wilson's purchase, went to the British Museum. Several specimens apparently from this subsequent collection are given in the Catalogue of Birds, as types of species described long before Dr. Wilson's purchase, whereas the Academy specimens have the better claim, the others being, so far as I can judge, topotypes secured some time afterward. There is no reason to suppose that Gould withheld any of the specimens he possessed at the time of the sale.

Gould's collection, after purchase, was sent to Verreaux for mounting, and the original labels were removed, and their contents (or part of it) transcribed on the base of the stands, every specimen being marked "Type. Gould's Birds of Australia," no matter whether the species was Gould's or not!

Gould's original descriptions were for the most part published in the *Proceedings of the Zoological Society*, and are generally very meagre, so that it is impossible to tell how many of the numerous "type specimens" of each species he had at the time he prepared the diagnoses.

By careful study and comparison with the original descriptions it is possible to select the specimen which agrees in plumage, measurements and locality with the description in nearly every case, and such ones I have designated as the types.

Of the 391 names proposed by Gould for Australian birds (including those published in his *Handbook*) the types of 321 are in the Academy collection. Of the rest, fifty-six are in the British Museum, or other collections stated by Gould, while of fourteen the actual type seems to have been lost, though paratypes or cotypes are still preserved in the Academy.

A complete manuscript catalogue of the Gould Australian specimens has been prepared, and may be published at some future time.

Below are given such of his types from localities other than Australia as are preserved in the Academy collection:

Nestor productus (Gould).

Plyctolophus productus Gould, P. Z. S., 1836, p. 19. 22,082. New Zealand. Gould coll. Type.

Ramphastos brevicarinatus Gould.

Ramphastos brevicarinatus Gould. Mon. Ramph., ii Ed., pl. iii (1854). 20,375. Mexico. Rivoli coll. Type.

Ramphastos citreolæmus Gould.

Ramphastos citreolæmus Gould. P. Z. S., 1843, p. 147. 20,391. Bogota. Rivoli coll. Type.

Todirhamphus recurvirostris Lafr.

Haleyon platyrostris Gould, P. Z. S., 1842, p. 72. 21,449. Navigator Islands. J. Gould. Type.

Chamæza nobilis Gould.

Chameza nobilis Gould. Ann. and Mag. Zool., xv, 2d Series, 1855, p. 344.

8,517. Peru. "No. 2 Chamæza nobilis, sp. nov., Gould. Type."

The above data are in Gould's hand. The British Museum *Catalogue* contains another specimen with the same data, which is recorded as the type.

Heteralocha acutirostris (Gould).

Neomorpha crassirostris Gould. P. Z. S., 1836, p. 145.

16,021. A New Zealand. J. Gould. Type.

If we regard Neomorpha and Neomorphus as distinct names, Neomorpha should stand for this bird. Otherwise it is antedated by Neomorphus Gloger in the Cuculidæ.

Zosterops albigularis Gould.

Zosterops albigularis Gould. P. Z. S., 1836, p. 75. 18,257. Norfolk Isl. J. Gould. Type.

Zosterops tenuirostris Gould.

Zosterops tenuirostris Gould. P. Z. S., 1836, p. 76.

18,255. Norfolk Isl. J. Gould.

18,256. Norfolk Isl. J. Gould.

Petroica multicolor (Gm.).

Petroica modesta Gould. P. Z. S., 1837, p. 147.

662. ♀ Norfolk Isl. J. Gould. Type.

Petroica pulchella Gould. P. Z. S., 1839, p. 142.

661. Norfolk Isl. J. Gould. Type.

# SIR A. SMITH.

A number of specimens received from Jules Verreaux are marked by him both on the stands and in the catalogue "Type de Smith," referring to the publications of Sir A. Smith in the Report of the S. African Expedition and Illustrations of the Zoölogy of South Africa. The types of most of Smith's species are recorded as being in the British Museum, but where this is not the case the Academy specimens must be considered as the types. No particulars are preserved as to how many of Smith's specimens Dr. Wilson procured.

In all cases the Academy specimens are cotypes, and I therefore give a full list of them below, which their importance seems to warrant.

Being unable to consult the Rep. S. Afr. Exp., I quote the references from the British Museum Catalogue of Birds.

Sarothrura elegans (Smith).

Gallinula elegans Smith. Ill. Zool. S. Afr., 1839, pl. 22. 6,291. A Cape of Good Hope. "Type de Smith."

None of Smith's specimens are in the British Museum.

Thalassornis leuconotus (Eyt.).

Clangula leuconota "Smith." Eyton Mon. Anat., 1838, p. 168. 5.517. O Cape of Good Hope. "Type de Smith and Eyton."

Three specimens marked type are in the British Museum (Cat. of Bds., xxvii, p. 438).

Caprimulgus lentiginosus Smith.

Caprimulgus lentiginosus Smith. Ill. Zool. S. Africa, 1845, pl. 101. 21,839. ♀ Cape of Good Hope. "Type de Smith."

Another type specimen is in the British Museum (Cat. of Bds., xvi, p. 537).

Caprimulgus rufigenus Smith.

Caprimulgus rufigena Smith. Ill. Zool. S. Afr., 1845, pl. 100.

21,830. ♂ Cape of Good Hope. "Type de Smith."

21.831. ♀ Cape of Good Hope. "Type de Smith."

21,834. jr. o Cape of Good Hope. "Type de Smith."

21,835. Cape of Good Hope. "Type de Smith."

Two specimens from Smith in the British Museum are not marked as types (Cat. of Bds., xvi, p. 533).

Caprimulgus natalensis Smith.

Caprimulgus natalensis Smith. Ill. Zool. S. Afr., 1845, pl. 99.

21,884. Port Natal. "Type de Smith."

Two specimens marked type in British Museum (Cat. of Bds., xvi, p. 564).

Alæmon nivosa (Sw.).

Alauda lagepa Smith. III. Zool. S. Afr., 1845, pl. 87, fig. 2.

14,729. or Cape of Good Hope. "Type de Smith."

Two types in British Museum (Cat. of Bds., xiii, p. 524).

Alæmon semitorquata (Smith).

Certhilauda semitorquata Smith. Rep. Exp. S. Afr., 1836, p. 47.

14,727.  $\bigcirc$  Cape of Good Hope. "Type de Smith" (fide Verreaux).

Type in British Museum (Cat. of Bds., xiii, p. 522).

Mirafra africanoides Smith.

Mirafra africanoides Smith. Rep. Exp. S. Afr., 1836, p. 47.

14,764. ♂ Cape of Good Hope. "Type de Smith."

Type in British Museum (Cat. of Bds., xiii, p. 616).

Mirafra sabota Smith.

Mirafra sabota Smith. Rep. Exp. S. Afr., 1836, p. 47.

14,761. Tape of Good Hope. "Type de Smith."

A specimen from Smith is in the British Museum, though it is not marked as the type (Cat. of Bds., xiii. p. 618).

Pyrrhulauda verticalis (Smith).

Megalotis verticalis Smith. Rep. Exp. S. Afr., 1836, p. 48.

14,865. ♀ Cape of Good Hope. "Type de Smith."

14,866. ♀ Cape of Good Hope. "Type de Smith."

14,871, juv. o Cape of Good Hope. "Type de Smith."

14,850. Cape of Good Hope. "Type de Smith."

A specimen from Smith is also in the British Museum, but is not marked type (Cat. of Bds., xiii, p. 656).

Pyrrhulauda smithii Bp. Consp. Av. 1, p. 512, 1850.

Pyrrhulauda leucotis Smith (nec. Stanley).

14,872. ♀ Cape of Good Hope. "Type de Smith."

14,841, juv. ♀ Cape of Good Hope. "Type de Smith."

14,843. ♀ Cape of Good Hope. "Type de Smith."

14,848. A Cape of Good Hope. "Type de Smith."

Based by Bonaparte on Smith's specimens. Two of these in British Museum are marked types (Cat. of Bds., xiii, p. 658).

Pyrrhulauda australis (Smith).

Megalotis australis Smith. Rep. Exped. S. Afr., 1836, App., p. 49.

14,874. ♀ Cape of Good Hope. "Type de Smith."

14,876. O Cape of Good Hope. "Type de Smith."

A type specimen also in the British Museum (Cat. of Bds., xiii, p. 652).

Fringillaria tahapisi (Smith).

Emberiza tahapisi Smith. Rep. S. Afr. Exp., 1836, App., p. 48.

10.569. ♀ Cape of Good Hope. "Type de Smith."

10,574.  $\bigcirc$  Cape of Good Hope. "Type de Smith."

No Smith specimen in the British Museum.

Fringillaria impetuani (Smith).

Emberiza impetuani Smith. Rep. S. Afr. Exp., 1836, App., p. 48.

10,578. Cape of Good Hope. "Type de Smith."

10,579.  $\ \$  Cape of Good Hope. "Type de Smith."

Two types are also in the British Museum (Cat. of Bds., xii, p. 564).

Passer diffusus (Smith).

Pyrgita diffusa Smith. Rep. S. Afr. Exp., 1836, App., p. 50.

10,174. A Cape of Good Hope. "Type de Smith."

10,165. Tape of Good Hope. "Type de Smith."

10,170. ♀ Cape of Good Hope. "Type de Smith."

Two types also in British Museum (Cat. of Bds., xii, p. 337).

Poliospiza gularis (Smith).

Linaria gularis Smith. Rep. S. Afr. Exp., 1836, App., p. 49.

10,070. ♀ Cape of Good Hope. "Type de Smith."

10,072. O Cape of Good Hope.

Two specimens are in the British Museum, but are not marked as types (Cat. of Bds., xii, p. 344).

# Serinus albogularis (Smith).

Crithaga albogularis Smith. S. Afr. Quart. Jour., 1833, p. 48. Crithaga selbyi Smith. Rep. S. Afr. Exp., 1836, App., p. 50. 10,246.

This specimen is marked as type of *C. selbyi*. There is also a specimen in the British Museum, but it is not marked type (*Cat. of Bds.*, xii, p. 360).

# Estrilda erythronota (Vieill.).

Estrelda lipiniana Smith. Rep. Expl. S. Afr., 1836, App., p. 49. 14,669. 
Cape of Good Hope. "Type de Smith." 14,671. 
Cape of Good Hope. "Type de Smith."

A specimen is in the British Museum, but not marked as the type (Cat. of Bds., xiii, p. 398).

## Sporopipes squamifrons (Smith).

Estrelda squamifrons Smith. Rep. Exp. S. Afr., 1836, p. 49. 13,911. ♀ Cape of Good Hope. "Type de Smith."

Type in British Museum (Cat. of Bds., xiii, p. 408).

# Lagonosticta brunneiceps Sharpe. Cat. of Bds., xiii, p. 277.

Estrelda vieillotti Smith. [MSS. ?]

14,389. Q Cape of Good Hope. "Type de Smith."

I find no mention of this name of Smith's, but not having access to the Rep. S. Afr. Exp., cannot ascertain whether it is published or not. If it is, it will, of course, antedate brunneiceps of Sharpe.

## Penthetriopsis macroura (Gm.).

Euplectus booriensis Smith. [MSS. ?]

14,238. Cape of Good Hope. "Type de Smith."

14,292. Q Cape of Good Hope.

14,293. Q Cape of Good Hope.

This is another name which has apparently not been published, but I am unable to satisfy myself upon this point.

#### Plocepasser mahali Smith.

Plocepasser mahali Smith. Rep. Exp. S. Afr., 1836, App., p. 51.

14,256. Cape of Good Hope. "Type de Smith."

14,257. Q Cape of Good Hope. "Type de Smith."

Two types in British Museum (Cat. of Bds., xiii, p. 246).

Pyromelana taha (Smith).

Euplectes taha Smith. Rep. Exp. S. Afr., 1836, p. 50.

14,294. ♂ Cape of Good Hope. "Type de Smith."

14,296. O Cape of Good Hope. "Type de Smith."

14,297.  $\stackrel{\frown}{\mathbb{Q}}$  Cape of Good Hope. "Type de Smith." 14,298.  $\stackrel{\frown}{\mathbb{Q}}$  Cape of Good Hope. "Type de Smith."

14,299. O Cape of Good Hope. "Type de Smith."

Two types also in British Museum (Cat. of Bds., xiii, p. 243).

Hyphantornis Sp.?

Ploceus obscurus Smith. [MSS.?]

14,708. "Type de Smith."

14,027. "G" Cape of Good Hope.

No. 14,027 is marked "P. tahatali Smith," but it is evidently this species. These birds seem to be a female and young of some large species of *Hyphantornis* with wing measuring 3.25 ins.

Hyphantornis velatus (Vieill.).

Ploceus tahatali Smith. Rep. Exp. S. Afr., 1836, p. 50.

14,707. ♀ Cape of Good Hope. "Type de Smith."

A type specimen in the British Museum (Cat. of Bds., xiii, p. 466).

Hyphantornis velatus mariquensis (Smith).

Ploceus mariquensis Smith. Ill. Zool. S. Afr., 1845, pl. 103.

14,049. jun. of Cape of Good Hope. "Type de Smith."

Series of types in the British Museum (Cat. of Bds., xiii, p. 467).

Quelea quelea (L.).

Loxia latharni Smith. Rep. S. Afr. Exp., 1836, App., p. 51.

14,340. 

Cape of Good Hope. "Type de Smith."

14,345. ♀ Cape of Good Hope. "Type de Smith."

No type in British Museum.

Philæterus socius (Lath.).

Philaterus lepidus Smith, in Charlesw. Mag., 1837, p. 536.

14,327.  $\bigcirc$  Cape of Good Hope. "Type de Smith."

14,333. jnn. ♀ Cape of Good Hope.

Three types are in the British Museum (Cat. of Bds., xiii, p. 250).

Cinnyris mariquensis Smith.

Cinnyris mariquensis Smith. Rep. S. Afr. Exp., 1836, App., p. 53.

18,025. ♂ Cape of Good Hope. "Type de Smith."

18,026. ♀ Cape of Good Hope. "Type de Smith."

18,181.  $\bigcirc$  Cape of Good Hope. "Type de Smith."

No type in the British Museum.

Cinnyris olivacea Smith.

Cinnyris olivacea Smith. Ill. S. Afr. Zool., 1839, in text to pl. 57.

18,037. O Cape of Good Hope. "Type de Smith."

No type in British Museum.

Cinnyris leucogaster Vieill.

Nectarinia talatala Smith. Rep. Exp. S. Afr., 1836, App., p. 58.

18,120. ♀ Cape of Good Hope. "Type de Smith."

18,121. Cape of Good Hope. "Type de Smith."

No type in British Museum.

## OTHER AUTHORS.

A few types of other authors were contained in the collections purchased by Dr. Wilson, as given below:

Cassicus montezumæ (Less.).

Cacicus montezumæ Less. Cent. Zool., p. 33 (1830).

3,769. Mexico. & Type.

This specimen is stated by Cassin to be the type (Proc. Acad. Nat. Sci. Phila., 1867, p. 71).

Polyplectrum napoleonis Less.

Polyplectrum napoleonis Less. Traité d'Orn., 1831, pp. 487, 650.

12,732. "♂ des Isles de Indes (?) ou des Moloques."

"Type de Less. et de Temm." Rivoli coll.

Neorhynchus naseus (Bp.).

Neorhynchus peruvianus Less. Gray Handlist Birds (1870), i, p. 107. 9,811. "Peron. Type de la description de Lesson."

I cannot find the original place of publication of this species, and it may be only a manuscript name.

Picathartes gymnocephalus Temm.

Corvus gymnocephalus Temm. Pl. Col. 327.

3,091. "Type de Temminck."

Apparently one of the specimens purchased by Dr. Wilson from Temminck's collection.

Trogon meridionalis Swains.

Trogon affinis Des. & Dev.

21,003. Trinidad. Rivoli coll. "Type de Des. & Dev." (Verreaux).

21,002. Cayenne. Rivoli coll. "Type de Des. & Dev."

I do not find the name affinis, and it seems to have existed only in manuscript.

Ptilopus rivolii Prev. & Knip.

Columba rivolii Prev. & Knip. Pig. II, pl. 57 (1838-43).

13,119. Rivoli coll. "P. rivolii Prev., Original Specimen."

Eupetomena macrurus (Gm.).

Trochilus hirundinaceus "Vieill."

23,341. Type of Vieill. (fide Verreaux).

Vieillot called the bird "Oiseau-Mouche a queue fourchue de Cayenne," and it was Lesson who bestowed the name hirundinaceus upon it. Whether this is Lesson's type is perhaps questionable.

## Drymornis bridgesi Eyt.

Nasica bridgesi Eyt. Contr. Orn., 1849, p. 130. 6,925. Bolivia (?). "Type."

The type of this species is recorded as being in the British Museum (Cat. of Bds., xv, p. 157).

## Muscicapa lugens (Hartl.).

Muscicapa cassini Heine. Jour. für Orn., 1860, p. 428.
619. Camma river, W. Africa. DuChaillu coll. Type.
620, juv. Camma river, W. Africa. DuChaillu coll.

Based on Cassin's description of the above specimens.